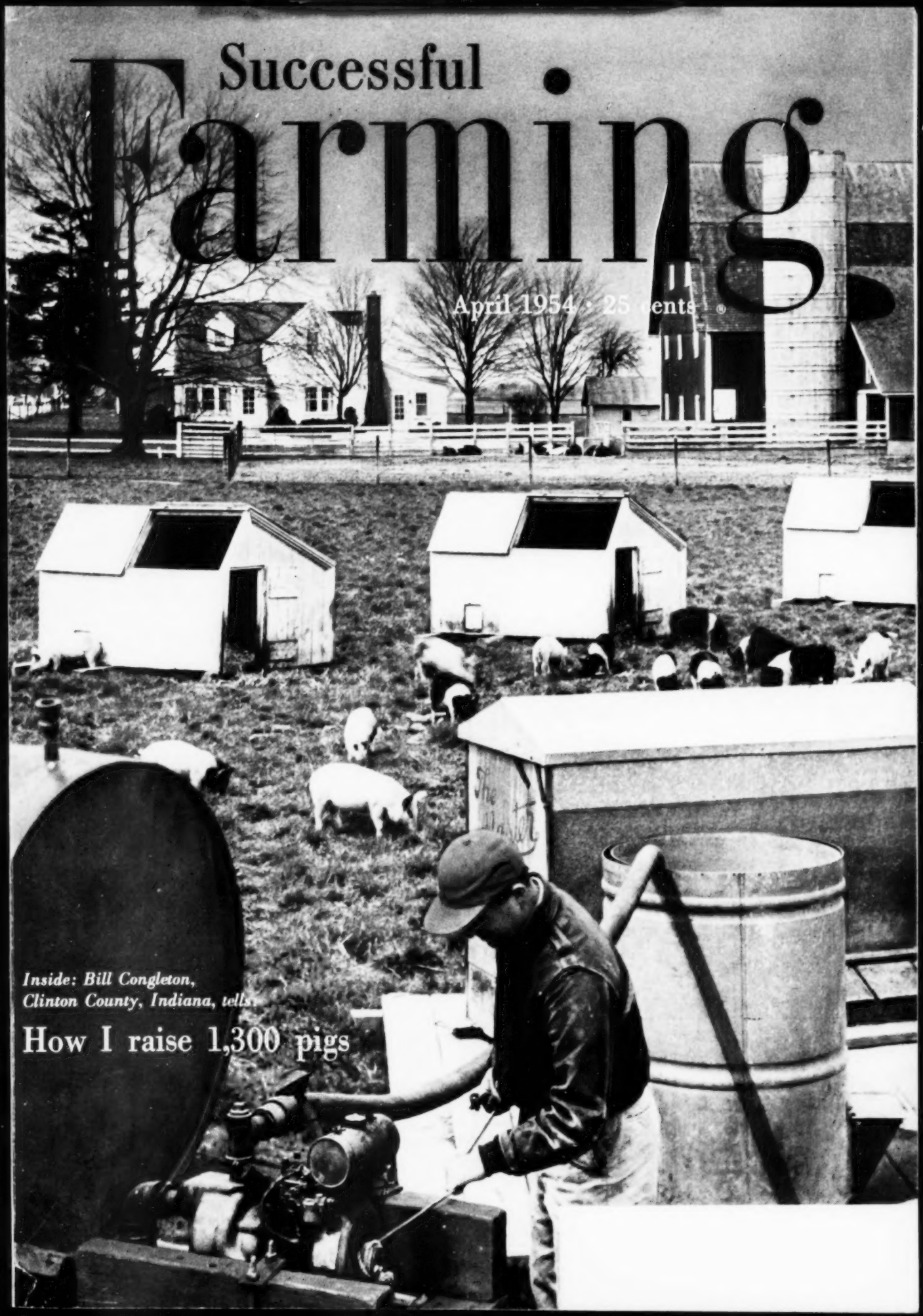
Successful Farming

April 1954 · 25 cents ®



Inside: Bill Congleton, Clinton County, Indiana, tells

How I raise 1,300 pigs

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THE NEW DRESSLYN features large storage compartments, a medicine cabinet with lock, a pull-out tray, and roomy cosmetic drawers.

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make it easy to change your color scheme as often as you like!

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The Corallin bathroom fixtures shown include a ten per cent longer bathtub for luxurious bathing. Like all American-Standard baths, it is made of rigid cast iron with a smooth, thick enamel coat. The New Dresslyn with wide, roomy counter top smartly combines lavatory and cabinet in one American-Standard unit. Both the toilet and the lavatory are of easy-to-clean, genuine vitreous china.

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Ask your American-Standard retailer about easy payment terms for these and other beautiful bathroom fixtures. He's listed under "plumbing fixtures" or "plumbing supplies" in the Yellow Pages of your phone book.

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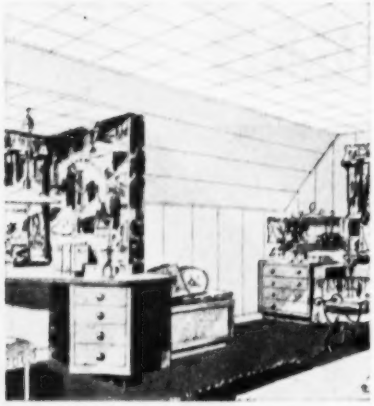

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Successful Farming

THE MAGAZINE OF FARM BUSINESS AND FARM HOMES
April, 1954 Vol. 52, No. 4

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Published monthly by Meredith Publishing Company, 1716 Locust St., Des Moines 3, Iowa. Printed in U.S.A.

HOW LONG SINCE YOU TOOK INVENTORY?

You may be surprised to discover how much you are actually worth!

Most farmers have a rough idea of what they've put into their farms over the years in the way of land purchases, new equipment, buildings, livestock and the like. But few have taken the trouble to find out what their property is actually worth *today* in terms of *today's prices.*

To do this may not seem particularly important to you as of now. But it can be tremendously important to your family later on.

For example, if you should happen to die prematurely, the estate taxes your heirs would have to pay would not be based on what you *paid* for your farm, but on the *current evaluation* of your property. And the higher the evaluation, the more sharply the tax rate rises.

As a result, your heirs might suddenly find themselves faced with the problem of paying thousands of dollars more in taxes than they are prepared to pay—and might well have to sell part of the property at a sacrifice to make up the difference.

The sensible way of making sure your family will have enough ready cash on hand is this: (1) Find out what your farm assets *really* are. (2) Get a sound estimate of what the estate taxes, inheritance taxes, probate and administration costs are likely to be. (3) Take out enough life insurance to guarantee your family enough cash to pay estate settlement costs.

The New York Life agent in your county will be glad to show you how easily the whole thing can be worked out—and explain the many advantages this plan offers both to you and to your family. Why not get in touch with him today and talk it over. If you don't know his name, just write to the Home Office at the address below.

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Farm Outlook®

Latest information on conditions, production, markets, and income prospects

Spring forecast

Here's an early-season forecast of this year's farm *production* volume:

Percent change from 1953	Up	Down
Wheat		16
Corn		7
Oats	15	
Barley	20	
Grain sorghums	83	
Soybeans	33	
Flaxseed	30	
Cattle slaughter		3
Calf slaughter	3	
Sheep and lamb slaughter		11
Hog slaughter		5
Milk	2	
Eggs	5	
Chickens	3	
Turkeys	10	

Seal, reseal your wheat

Even though this year's wheat acreage is down 16 percent, *total* 1954 wheat supply will be greater than last year's because of increased carryover and decline in exports.

New-crop wheat will sell below support this summer, then work higher through fall and winter. Finding storage will be a problem, especially in the Northwest.

You should: Put all the wheat you can under price support. Reseal old wheat for storage payment.

Feed-grain picture

Smaller corn crop will pull down total supply and strengthen prices of old and new corn. Also, more will be fed during the coming year, and this will help reduce corn surplus.

Corn carryover on October 1, 1955, may be down to 750 million bushels from this year's 890 million. **Consider this: Reseal old corn, earn storage payment.**

Bigger oats, barley, grain-sorghums crops will offset reduction in corn crop—make total supply of feed grains *about same* as last year's. Increased feed use, however, will **cut feed-grain carryover** in 1955 about 6 percent below 1954.

Plan on this basis for now: Feed grains will sell higher—cost buyers more—next winter than last.

Price support helped

Please note well—that prices of your wheat and feed grains would have been a good deal lower these past 9 months if you and other farmers hadn't put *over a billion bushels* under price support. Even this big quantity didn't prevent market prices from falling below supports—but it certainly was a valuable *cushion*.

Note this: April likely will register the *seasonal peak* of wheat prices before new-crop grain becomes an influence in May; corn also is likely to sell *at* or *above* support levels before the new crop comes in.

Oilseeds-price outlook

Big increase in this year's soybean crop means lower prices. Price support was cut to $2.22 a bushel for 1954 crop to limit acreage shift *from* corn. More beans will be crushed in 1954-55, more exported than in 1953-54.

It looks as though market prices will average higher than support but below this past winter's highs. **Meal supply will be bigger next winter.**

New-crop flaxseed, plus carryover of old seed and oil, will supply *all known* industrial needs for *next 2½ years*. There's just too much of this stuff. Market prices for this year's crop will average *below* support of $3.14 a bushel. **So you should:** Put seed under support.

Warning to hog raisers

Decrease of about 4 percent in carcass weight of livestock slaughter this year will be principally in hogs because of last fall's small pig crop. Slaughter will be down through summer, up next fall and winter because of bigger spring pig crop.

Here's the warning: If you bought gilts—as many farmers did—in January at $35 a hundred, you are taking quite a gamble on December hog markets. Hog prices next December won't be anywhere near the highs of last December.

But the outlook for hog producers continues to be favorable for the next few months. Here are month-by-month highlights in this year's picture: Farrowings last August and September were comparatively large. This points to peak marketings in April. *After* the peak, market supplies will be unusually small—even 8 to 10 percent less than last year. Prices for April are expected to average a little below the recent winter highs, but to show a steady-to-higher trend.

Big farrowings in March this year mean large market supplies and seasonally *low* prices for next October and November.

Record cattle population

The cattle and calf population *continues to increase* in spite of last year's high record slaughter.

The number of cattle and calves on farms January 1 was a new high record 94.7 million head, compared with last year's 93.6 million.

Significance is that most of the increase was in cows and heifers 2 years old and older. Beef cows totaled 23.8 million head compared with last year's 22.5 million; milk cows 24.7 million against last year's 24.1 million.

The number of steers 1 year old and older was 8.1 million head, compared with last year's 9 million.

These figures point to: reduced cattle slaughter, increased calf slaughter, and a continuing big flow of milk.

Cattle kill

Cattle slaughter will be down, calf slaughter up this year—a standoff. Cattle slaughter will contain bigger proportion of range and grass stuff.

Cattle on feed this winter in the Cornbelt was down 10 percent from a year ago. Nearly half the decrease in numbers was in Iowa—off about 16 percent. But during the early weeks of this year, farmers bought *one-third more* stocker and feeder cattle than they did the year before.

You should: Get cheaper cattle ready for market during the next 60 to 90 days. Scarcity of both cheap beef and of pork will support prices. Finished beef will bring good prices this spring—but expect some seasonal weakness in top quotations as days grow longer.

Fewer woolies

Number of sheep and lambs on feed in the Cornbelt was down 6 percent. Biggest decline was in Iowa—off about 15 percent. More lambs were on wheat pastures in the Great Plains than a year ago.

Push lambs along fast. Plan to feed both ewes and lambs if pastures fail. Light lambs will sell well—if they are fat.

Dairy prices—lower

Milk production this year looks like a record high 123 billion pounds, compared with last year's 120 billion. At the same time, there is no indication as yet that consumers will drink more milk and use more cream than they did last year.

This means: A further increase in the production of butter, cheese, and powder—already in surplus. Dairy prices will be lower this year for milk and butterfat. Except for base milk, dairy prices will lean on support levels—**which have been dropped from 90 to 75 percent of parity effective April 1.**

Lower egg prices

This year's increase in egg lay—estimated at about 5 percent—will be *more* than the increase in the civilian population. **This means: lower egg prices.** END

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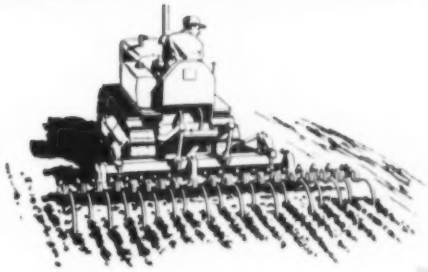

Do you need another tractor this spring? Are you saying, "I can't afford a new machine . . . but I can't be sure of a used one?" Here's how you can take the guess and gamble out of buying used equipment:

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You are also offered two other classes of used equipment buys . . . "Certified Buy" and "Buy and Try" . . . these cover used equipment of *any* make.

What does this mean to you? You are absolutely sure of what you're getting. Your assurance is in writing. What's more, no matter what your needs, cost-wise or work-wise, you'll find the equipment that fills the bill, backed by a written guarantee.

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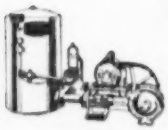

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Friend to Friend

On buying farms—Night schools—Meat-type hogs—Molasses vs. corn—An apology

● Is it a stand or must it be plowed up? With George Johnson, our crops and soils editor, I have been checking a number of Cornbelt fields. (Picture at right.) We suspected the **severe drouth** of the fall and winter had weakened **legume seedings** and old stands, too. There is yet hope for many fields. They can be encouraged with a little fertilizer. A good stand of legumes is worth working for, now that millions of acres must be diverted from corn and wheat.

● **April** has had many things said about it. For an hour or even a day it can be the **loveliest month** in the year. Then, in a swirl of snow and icy rain it can revert in a few hours to all the **unpleasant features of a winter** that stuck around too long. For the Cornbelter who likes to boast about the deep soil on his farm, there comes the opportunity to see it all the way to the bottom. Muddy lanes and yards seem practically bottomless. Eventually feedlots and yards will have **concrete** platforms. Lanes will have deep gravel. Heavy trucks are hastening the day when farm lanes must be better surfaced to withstand April weather.

● Molasses is the remainder of cane juice after the sugar has been extracted. It is my understanding that this valuable feedstuff has little market value where great quantities of sugar are made. However, it is a long way from the Cornbelt. **Cheap water transportation** by **ocean** and the **Mississippi River** puts it into a competitive position to corn to a considerable degree. And to livestock producers in the Eastern states, molasses is more attractive in price than is our Midwest corn because they must ship our corn so far. The rapid expansion of molasses tonnage used following an improved price relationship gives the corn producer a real competitor.

● To my friend **John Gustafson,** a breeder of **Milking Shorthorns,** my apologies. In this column for February, I credited the Brown Swiss as the first breed association to admit superior-grade animals to the herdbook. John's letter includes the regulations of the American Milking Shorthorn Society to show me it, too, accepts superior grades for registry. The program was put into operation in 1943.

● Many men **buy farms** because they want to **set their own farming program.** As tenants, they frequently find the landlord insists on **dictating** the program, or else he hires a management expert to advise him. Seems to me **folly** to keep a tenant these days whose judgment in planning crops and livestock can't be trusted.

● Attended **night school** this winter? Thousands of farmers and their wives are taking regular courses in their local high school's evening classes. I find these schools attract the **keenest** and **most eager** to learn of all ages. They are doing a great amount of good, both in teaching farming and encouraging more social life in the country.

And speaking of night schools, I visited one of the classes that one of my sons teaches in a city university. Most of these young men had been obliged to end their formal education early. Now they are working late at night to increase their fitness for their jobs and to advance.

After you have mingled with a throng of these earnest young people, you **don't worry so much about the youth of America.** On the farm and in the great cities you can find plenty of the right kind.

● All signs point to a **new method** of **buying hogs** for their meat quality in the near future. Already, many farmers are getting 50 cents or more premium per 100 pounds for their meat-type hogs. This general move has been inevitable since animal fats began feeling tough competition in the washing-compound market. By the time you need a new boar next fall, I predict **meat-type animals** will be recognized generally for their real value. Better get in your bid for such a sire early.

Kirk Fox

FARM NEWS GRAPHIC

"My five sons and I farm like one man..."

"At harvest time or spring plowing my five sons and I get together," says Henry Krehbiel of Kingman County, Kansas. "The boys all have their own farms . . . 15 or 20 miles from each other . . . but when it comes to working we pool our power equipment and pitch in . . . all for one.

"When it comes to buying we all act like one man too. I've been using Standard products for over 21 years. I know I can depend on Standard for the best. And buying Standard has become a family custom with all the Krehbiels. From the time they got their own farms every one of the boys has bought *only Standard.*"

Oldest son Alvin, who has operated his own farm for 18 years says, "With the big investment a farmer makes in power equipment nowadays, we can't take chances. That's why I buy RED CROWN. I know I'm getting power I can depend on. No matter what the weather or the season—RED CROWN *has never failed me!*"

To a man, the Krehbiels all agree it's good farm business to do business with Standard. Shown left to right are: Henry Krehbiel and five sons, Alvin, Eugene, Leonard, Marvin and Floyd. With the Krehbiels, Standard is a family custom that makes good business sense.

It's purple... it's powerful! Yes, famous RED CROWN Gasoline is at the highest octane level in its history. Powerful, constant in uniformity . . . it delivers the power you want and need for passenger car, truck and tractor. And so you can be sure you're getting RED CROWN and nothing else, this great gasoline now carries a distinctive *purple color.* That means it's RED CROWN . . . and Powerful! It's purple for your protection, quality-guarded from refinery to farm.

New STANDARD RED CROWN *with distinctive purple color now available in these states: Michigan, Indiana, Wisconsin, Illinois, Minnesota, Iowa, Missouri, North and South Dakota, Kansas, Nebraska.*

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This weight or thickness of zinc coating cannot be determined by looking at a galvanized sheet.

Insist on *grade-marked* galvanized roofing and know what you are getting. A small difference in the weight of coating means a large difference in the length of service.

It is thrifty to purchase metal roofing that is *grade-marked* to show the weight of the zinc coating.

Select the proper grade for the proper use—and for long rust-free service life and lowest per-year cost . . .

Specify a heavy-coated sheet such as "Seal of Quality," the SUPER SHEET for SUPER SERVICE

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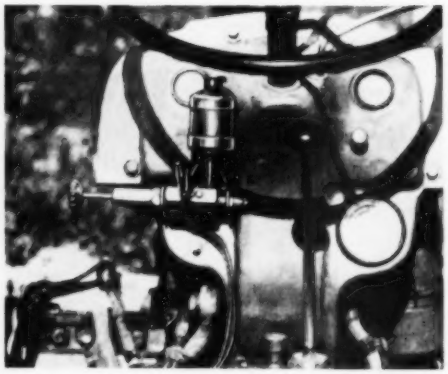
Tips you can use today

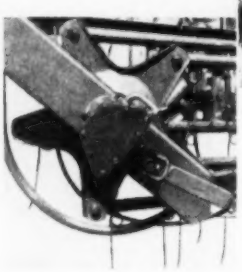


Tractor lubricator. Pumping unit on this device is located within easy reach. Seamless tubing connects each stationary bearing.

Flexible hose supplies grease to bearings on moving parts. A couple of handle strokes lubricate each bearing equally, it is said.—*Lincoln Engineering Company, 5701 Natural Bridge Boulevard, St. Louis, Missouri.*

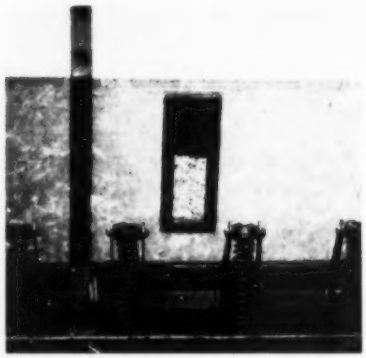
New rake. This machine reduces forward motion of hay by 50 percent, according to manufacturer. Raking reel has 5 bars.

A simple drive shaft, universal joint, gear box take power from the left wheel.—*New Holland Machine Company, of New Holland, Pennsylvania.*

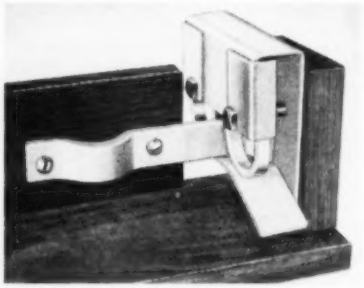


Pond and canal liner. Obtained in easy-to-handle rolls, bituminous membrane material is surfaced with mica on one side and sand on the other.

It is impervious to water, tough to resist tearing during application, and flexible.—*The Ruberoid Company, 500 Fifth Avenue, New York 36, New York.*



"Window" for grain drill. Easily installed without special tools, this plexiglas unit with fiber gasket allows farmer to watch level of grain in hopper.—*Eli Walter and Sons, Huron, South Dakota.*



Gate latch. Strap on closing gate raises one of loose rings and passes under it. Gate will not open unless one of rings is raised by hand. It works with sliding doors, too.—*Robinson Wholesale Company, 216 Second, Des Moines, Iowa.*

Aluminum "sandwich-type" panel. Two sheets of aluminum, bonded with heat and pressure to a core made from resin-impregnated paper formed into a honeycomb construction, make up this new panel.

It is said to be much lighter than other materials and has high-insulating properties against heat and sound, while having sufficient strength to be completely self-supporting for many applications.

Thicknesses range from 1 to 4 inches.—*Reynolds Metals Company, 2500 South Third Street, Louisville, Kentucky.*

Belt pulley optional at additional cost.

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Instantly, without shifting gears or touching the throttle

- Boost pull-power up to 45 per cent.
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- Choice of *two* speeds in each gear, giving *10 forward speeds*, including new low-low and intermediate high.

A NEW revolutionary independent power take-off that maintains rated speed completely independent of tractor motion.

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How to Protect

On the farm, our hands are still our most useful workers. These busy hands can quickly show outward evidence of age through overuse and mistreatment. Here are some simple suggestions for everyday hand care. Make the routine easy to follow by keeping needed supplies in convenient locations. Compliments and good grooming will be your rewards, plus greater working comfort.

For washing dishes, scrubbing, canning, wear rubber gloves with clothlike lining and ribbed finger grips.

Be sure gloves fit snugly. With the soft lining they go on and off easily. Ribbed fingers aren't slippery when wet.

Wear an old pair of cotton dress gloves (preferably white) when dusting, painting, gardening, for any outdoor work.

These gloves are light in weight, more comfortable and convenient than bulky work gloves, yet provide protection against polishing waxes, dust, paint chemicals.

busy hands

Repair the damage to nails or skin on your hands immediately. A few moments for repair can help avoid painful torn cuticle, uneven nails, permanent skin scars.

Medicine kits, nail files, and cuticle scissors should be kept near all indoor and outdoor work centers.

Photographs: Fletcher

At least once a week, trim and file nails, push back cuticle. If skin is rough around fingertips, gently file away roughness with finest grain on an emery board.

These smoothed fingertips won't collect dirt and stains, or snag your clothing.

Use hands sensibly, not as tools. Prying with fingernails is destructive, and pliers or a screwdriver does a more efficient job. Try to avoid twisting or wringing by hand

◄

Be quick to wash hands when soiled or after contact with harsh substances. Always dry thoroughly on soft towel, gently pushing back cuticle.

Use cream or lotion on hands *after* washing, and *before* each soiling task.

Now PHILCO brings you

Philco Electric Range 449

the biggest WIDEST OVEN EVER

IN A FULL-SIZE ELECTRIC RANGE!

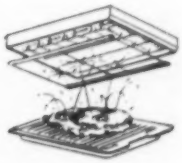
HERE at last is the *wide* oven you have always wanted! It's the "Dream Oven" in the new 1954 Philco Electric Range...and it's the biggest, w-i-d-e-s-t oven ever built into a full-size range. *So wide* you can put two large Angel food cake tins side-by-side on either rack . . . so *big*, it holds 20 pounds of bread . . . and *so efficient*, it cooks your biggest meal for *pennies!* *You are invited* by your local Philco Dealer to a personal demonstration of this new "Dream Oven" . . . and a showing of the 9 new Philco models for 1954—$199.95 to $469.95. *Stop in soon, won't you?*

Prices and specifications subject to change without notice.

WHICH COLOR SUITS YOUR KITCHEN? Choose from these four smart, *decorator* colors for the control panel of your new 1954 Philco Electric Range

New 1954 PHILCO TWO-OVEN RANGE
Model 849

America's most luxurious range, with Thrift and Banquet Ovens for utmost cooking flexibility and convenience.



"BROIL-UNDER-GLASS"
Gives you the juiciest steaks—*without smoke!* Hot coils are shielded from sizzling grease.

2-SPEED JIFFY GRIDDLE
Adds cooking area of two large surface units for hamburgers, eggs, etc. Solid aluminum—stays bright!

Melodie Green SUPER KEM-TONE *combines with Caprice Yellow and Russet* KEM-GLO *on woodwork in this delightful room.*

OF COURSE YOU CAN AFFORD TO RE-DECORATE!

Super Kem-Tone

...the washable latex wall paint

Easy to Use

SUPER KEM-TONE comes ready to use. No thinning, just stir and apply with brush or Roller-Koater. Dries so quickly you can use your room the same day you paint it.

***Guaranteed Washable**

When thoroughly dry, SUPER KEM-TONE withstands repeated washings with usual household cleaners without losing its beauty. Guaranteed washable or your money back.

Enough SUPER KEM-TONE for the walls and ceiling of an average room costs less than $10.00. Nothing else, *regardless of cost*, can do so much so easily to improve a room.

SUPER KEM-TONE is the wonderful *latex* paint that's guaranteed* washable. Latex, the new miracle ingredient, adds super wear, super beauty and super washability. SUPER KEM-TONE is so easy to use with brush or Roller-Koater and dries so fast, you can paint and use a room the same day.

Choose from more than a hundred lovely colors, all available in both SUPER KEM-TONE and KEM-GLO, America's favorite enamel.

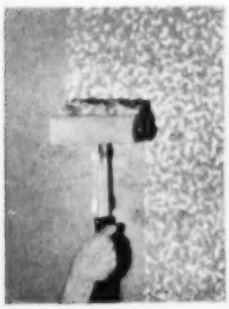
AT LEADING PAINT, HARDWARE, LUMBER AND DEPARTMENT STORES EVERYWHERE

$1.73 QUART

$5.45 GALLON

(Deep Tones $5.69 a Gallon)

If you wish, we will gladly recommend a painting contractor for any of your painting needs.



Newest Fashion in Home Decoration

.. *Applikay!*

Words and pictures can't do justice to the shimmering beauty of APPLIKAY* ... subtle designs you roll on your SUPER KEM-TONE walls. *You must see it to believe it!* See it on TV... ask your SUPER KEM-TONE dealer to show you how easily amazing new APPLIKAY can transform your rooms. *Trade-mark

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SUPER KEM-TONE and KEM-GLO are also made and distributed by:
W. W. Lawrence & Co., Pittsburgh; The Lowe Brothers Co., Dayton; John Lucas & Co., Inc., Philadelphia; The Martin-Senour Co., Chicago; Rogers Paint Products, Inc., Detroit; The Sherwin-Williams Co., Cleveland.

ON TV...TUNE IN "Where's Raymond", Starring RAY BOLGER...EVERY WEEK ON ABC NETWORK

Farm news of the month

First report on corn compliance

Chicago, March 12—First report of an extensive survey on what farmers will do about corn-acreage allotments indicates 35 to 40 percent of them plan to comply.

This was revealed here in results of an early-year study, conducted in Iowa and the northern three-fifths of Illinois by Iowa State College, and financed by the Chicago Union Stock Yards.

The study also indicated: (1) Nearly 61 percent of land taken out of corn will go to soybeans—a 20-percent jump in soybean acreage; and (2) figuring normal weather and yields, corn production in this heart-of-the-Cornbelt area will drop 5.3 percent.

Hormones—new beef-gain booster

Diethylstilbestrol—it may be our next big growth booster for cattle.

Feeding this synthetic hormone—usually called stilbestrol—has resulted in steer gains of *over 3 pounds per head per day* in tests at Iowa State College.

Here's how the tests were set up and the results of the trials conducted by Dr. Wise Burroughs and C. C. Culbertson:

Four lots of steers averaging 700 pounds were put on a full feed of cracked shelled corn, hay, and cornstalk silage. In addition, the steers received 2 pounds of soybean oil meal per head per day.

The only difference in the feed fed the four lots was in the amount of stilbestrol mixed with the soybean oil meal. Lot 1 received no stilbestrol. Lot 2 was fed 2¾ milligrams of stilbestrol per steer per day. Lot 3 received 5½ milligrams, and Lot 4 was fed 11 milligrams.

At the end of the 112-day feeding period, Lot 1 had gained 2.23 pounds per head per day; Lot 2 gained 2.46 pounds; Lot 3 gained 2.61 pounds; and Lot 4 gained 3.06 pounds per head per day.

Cost of feed per pound of gain stacked up this way: Lot 1, 22.1 cents; Lot 2, 20.2 cents; Lot 3, 20.9 cents; and Lot 4, 18.3 cents.

These results are startling, but there are a number of reasons why you won't be feeding stilbestrol right away. First, no experimental evidence is available on whether or not it's safe to feed this hormone to cattle other than steers. Second, the hormone is a drug, and it's use for feeding has not yet been approved by the Federal Pure Food and Drug Administration. Doctor Burroughs is hopeful that it soon will be approved for use in feeds.

You probably won't be mixing stilbestrol into feed on your own farm. The small amount used means that only commercial mixing equipment will be capable of doing the job. Cost of adding the hormone to a ton of supplement is expected to run about $10.

Latest on the dairy situation

Here's a summary of opinions of economists, creamery operators, and farmers as to the effect of the cut in dairy price supports from 90 to 75 percent of parity:

- Estimates of the cut in price of butter to consumers run from about 8 to 10 cents a pound.
- The price of milk to consumers should be cut about 1 cent a quart in most areas. The support-price cut probably won't affect *consumer* milk prices in big New York and Boston markets.
- There is much doubt that the cut in butter price will greatly stimulate consumption. However, milk consumption may go up enough to have a *greater* effect on the *total* dairy picture than the increase in butter sales.
- Hardest hit will be the operators of, and farmers who sell to small creameries who do not have a Grade-A-milk outlet and who have been selling butter to the government.

Wheat overplanting rule changed

If you planted more wheat than your marketing quota allowed, you can still bring your acreage into compliance by not allowing the wheat to mature. A recent change in provisions says that "wheat acreage" *does not* include acreage which "does not reach maturity because it is, *while still green*, turned under for green manure, pastured off, or cut for hay or silage." Notify your county A.S.C. office.

Boost for meat-type hogs

Before long, all hogs received at the Union Stock Yards in Chicago will be bought on a meat-type basis.

A program promoting meat-type hog buying is being sponsored by the University of Illinois, the Union Stock Yards, and other segments of the livestock industry. The program is divided into three parts:

1. Organizing and conducting hog-marketing conferences at the yard for packer buyers, order buyers, and commission salesmen.
2. A series of hog-marketing days at the yards for farmers.
3. County-wide meetings for farmers to encourage production of meat-type hogs.

Report on Mexican foot and mouth

Here's a special report on the foot-and-mouth-disease situation in Mexico: The last known infection of the disease was on December 26, 1953, according to Mexican sources. The disease has not expanded far beyond the original point—and it now looks as though the disease area will be cleaned up.

When will the Mexico-United States border be reopened? Best guess is about a year from the time the area is free of the disease.

Selling your products...

170,000,000 advertisements selling mothers on meat for their babies —that's just one of many ways we help promote the sale of the things you raise.

Less than eight years ago mothers did not know that specially prepared lean meat is one of the finest foods of all for babies. They know it now, and millions of babies begin to eat meat at an early age. That's good for them and good for all of us in the livestock-meat industry. Most of those babies will grow up liking meat . . . and as they grow older they will eat more. There you see meat consumption encouraged —by the development of a new product. That is only *one* of the ways that more people are being sold on eating more meat, more often.

Broadening the demand for meat is sure to help the livestock-meat industry. And every branch of our industry is cooperating. Individuals, livestock and farm organizations, even state governments, are raising increasing funds for meat promotions . . . The canning and packaging people add their skills. Fine canned meats and pre-packaged products, displayed with all the appetizing skill of modern store merchandising, tempt shoppers to buy more meat . . . People are sold and sold again on eating more meat to stay trim; to win "the battle of the bulge"; *to live longer* . . . The retailers spend millions of dollars for retail advertising designed to sell more meat.

All of these efforts are part of the free, competitive marketing in which we believe so firmly . . . part of the system that moves the meat from your livestock into the homes of 161,000,000 people who are *always being sold on meat.*

We meat packers, too, play our part. Our advertising sells meat . . . in newspapers and magazines; over the radio and on TV. The scientists in our research laboratories pioneer new products from livestock, new uses for by-products. Our home economists create new, appetizing recipes; tell folks about the goodness and nutritional values of meat. And our distribution systems deliver, nation-wide, the various weights and cuts of meat *where they are preferred*—so that housewives everywhere can buy the kind of meat they want, when they want it.

What Makes a Market?

The livestock-meat industry is typical of our American free market system. Livestock producers compete with each other —not only for the market, but also for efficiency of production.

The people who sell livestock for farmers and ranchers compete with one another. Each seeks to have larger sales volume and to get the highest prices.

Four thousand meat packers and 14,000 other commercial slaughterers compete with each other for the available livestock. They seek the lowest processing and distribution costs. They also *seek to be chosen* by more and more customers for their products.

The retailer competes for meat at the *lowest possible price.* He vies with other retailers for the best displays; and for the good will of the consumer.

The consumer tries to get what he wants at the *lowest price possible,* in competition with every other consumer.

The producer raises livestock as cheaply as he can under his conditions. He sells his livestock *as high as he can.* After proper processing, the meat packer sells the meat as high as he can to the retailer—who buys *as low as he can.* After preparing the meat, the retailer sells *as high as he can* to the consumer—who tries to buy *as low as she can.*

That's our free market system. That's the way prices are made—producers, marketing people, meat packers, retailers and consumers competing with one another. That's the American way.

Tom Glaze

Agricultural Research Department

Automatic Sprayer Controls Biting Flies on Cattle

by Dr. Willis N. Bruce, Illinois Natural History Survey, Urbana

Your cattle can spray themselves to control horn flies, stable flies and horse flies. An automatic sprayer has been developed which is operated by the animals. They go through a chute equipped with nozzles and a pump attached to a treadle. When the animal steps on the treadle it gets doused with a fine mist of insecticide that knocks out the flies.

An automatic sprayer can be built at home on most farms and ranches. They are placed where the animals go through sufficiently often to keep the flies under control. In most instances where the sprayer is used, there is little or no difficulty in training the animals to use it.

Tests show that biting flies can drain up to a pint of blood a day from an animal, and that, according to tests in southern Illinois, *can cost cattlemen a pound of beef per day.* That loss, in addition to the restlessness of the herd, causes a substantial reduction in the production of meat and milk. The cost of the spray is very little and the return from increased production soon pays for the equipment and spray.

Full details on how to construct and use these automatic sprayers are contained in Biological Notes No. 27. Write for a free copy. One copy will be mailed in answer to each request. Address your request to Illinois Natural History Survey, Urbana, Illinois.

FREE! New illustrated bulletin— "Cattle and Calves . . . Where They're Raised and Beef Is Eaten" offers interesting information to all students of the cattle industry in the U. S. Tells the history of cattle production . . . charts the growth of the industry . . . covers marketing . . . meat consumption . . . consumer preferences, and many other interesting facts. Write for your copy today to Swift & Company, Agricultural Research Dept., Chicago 9, Illinois.

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Nutrition is our business

Willys 4-Wheel-Drive Vehicles

Help Keep Work on Schedule...

Mr. W. G. Watt specializes in Milking Shorthorn Cattle and also raises approximately 800 head of hogs a year.

AT WAFARM

Murrayville, Illinois

Mr. W. G. Watt, Owner of Wafarm, Says: "We can reach our cattle anywhere in the fields, anytime, even when the ground is soft from Spring thaws, with the truck that always gets there—that's our 4-Wheel-Drive Willys Truck! On any kind of job, the Willys is a real time-saver." *Hurricane* Engine power and 4-wheel drive give this rugged tonner the traction to go through mud, snow and sand that stop other trucks. Once you put the Willys on your place, you'll wonder how you ever managed without it. See your nearest Willys dealer.

4-WHEEL-DRIVE WILLYS TRUCK

AT CEDAR BROOK FARMS

Prospect, Kentucky

Mr. Herbert Edwards, Manager, Cedar Brook Farms, Says: "The 'Jeep' is our handiest piece of equipment. It more than pays its way every day in the year on job after job—and especially when our other power units are busy." The extra traction of 4-wheel drive teamed with the *Hurricane* Engine gives power comparable to a two-plow tractor. Selective 2- and 4-wheel drive, with regular and low gear-ratios, provide correct speeds for transport, hauling, towing and field work. The 'Jeep' can help you do a bigger day's work . . . ask for a demonstration on your farm.

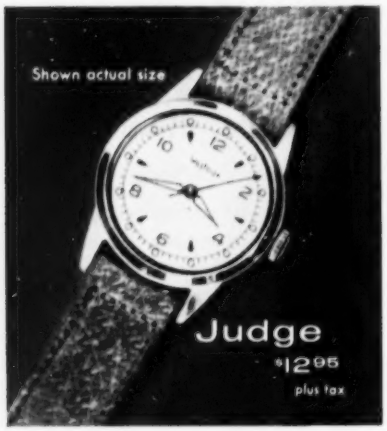
Cedar Brook Farms, noted for the breeding of Black Angus Cattle, have won many awards for their stock.

4-WHEEL-DRIVE *UNIVERSAL* **'Jeep'®**

KAISER-WILLYS SALES DIVISION • WILLYS MOTORS, INC. • TOLEDO 1, OHIO

Westclox

offers many modern features at a modest price



Shock resistant!

Water resistant!

Non-breakable crystal!

Luminous dial and hands!

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Guaranteed for one year!

Also dust resistant, sweep second hand, stainless steel back, metal dial.

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Other fine Westclox wrist watches, from $5.95—pocket watches from $2.95.

Prices quoted do not include tax and are subject to change.

WESTCLOX

Watches

LaSalle-Peru, Illinois

Products of GT General Time Corporation

The farmer's Washington

By Richard Wilson

- **Three-fourths of Secretary Benson's top aides have left**
- **A discussion: Should we sell farm surpluses to Russia?**
- **New conservation payments plan for diverted acres**

Fast turnover of Benson aides. Observers of the farm scene were astounded to realize, with the resignation of Howard R. Gordon as president of the Commodity Credit Corporation, that *three-fourths* of Secretary of Agriculture Ezra Taft Benson's *top* aides will have come and gone in the past year.

No shake-up or purge was involved. Many of the top people just moved out over a period of time. The kicker in this is that the man who was *supposed* to go, Benson himself, stayed and apparently has a firmer political foundation than he had before.

Gordon was an officeholder under Secretary of Agriculture Charles Brannan, and some farm politicians at the Capitol were glad to see him go for that reason.

The casualty list so far in the Benson regime includes: Gordon; Romeo H. Short, assistant secretary who resigned last fall because of illness; John C. Davis, special assistant; Assistant Secretaries John H. Davis and J. Earl Coke, who are expected to leave in the near future; and Harold Belknap, who served for a time as top press adviser to Benson. Still more top-level resignations are rumored.

Trade with Russia? A Mankato, Minnesota, businessman started something that may have far-reaching results. He is Dwayne Andreas, an official of a soybean-crushing firm. Andreas proposed to export up to 200,000,000 pounds of butter and 150,000 tons of cottonseed oil to the Soviet Union.

His first proposal was to take manganese—a strategic mineral which the United States has spent many millions to stockpile—in exchange for the butter. We have far *too little* manganese, far *too much* butter. The Russians were ready to make the deal, according to Andreas. It would have meant cut-rate butter for the Russians—they would get it cheaper than the American housewife.

After long and painful discussions inside government, *up to the cabinet level*, the government turned the deal down. Reaction of American housewives against letting the Russians have the butter cheap was said to be greater than expected. Also, Senator Joseph R. McCarthy, who opposes dealing with the Russians, made his objections known.

Andreas was left dangling. But he knew some things not known to the average American official. Andreas had attended a trade conference in Moscow in 1952, and saw the beginnings of a worldwide trade drive by the Soviet Union—a drive, incidentally, which was very attractive to the western European nations.

What happened when the United States turned down the deal? The Soviet Union bought its butter from Denmark. That took butter which ordinarily would have gone to England. And now, it is expected that England will come to the United States for butter, and we will virtually give it to them—*with no manganese in return.*

There are a good many officials, including Allan Kline of the American Farm Bureau Federation, who think this kind of thing just adds up to nonsense. There's no legal bar against trading with the Russians, if export licenses are granted. We embargo China, not Russia.

A good many officials, too, think that after a little more time passes, public opinion will change on this point. Andreas may have been a little ahead of the times. It is predicted that the last hasn't been heard of doing business with Russia, if there is a clear advantage on both sides. Some who strongly favor the continuance of the embargo against China, are strong for trade with Russia on *certain* items.

Supports and trade. A vigorous attack on rigid price supports was made by the Randall Commission, appointed by President Eisenhower to study out a new approach to world trade.

This commission pulled no punches. Its report said: "The commission believes that a dynamic foreign economic policy as it relates to agriculture cannot be built out of a maze of restrictive devices such as inflexible price-support programs which result in fixed prices, open or concealed export subsidies, import quotas at home and abroad, excessive use of tariffs here and abroad, exchange restrictions, and state trading.

"If we are to have a foreign economic policy which will make its best contribution to the strengthening of our long-term development of foreign markets for farmers, we must move as rapidly as possible

[*Turn to page 20*

BIG and ROOMY

New General Electric Refrigerator for Farm Families

There's more than 11 cubic feet of storage space in this new General Electric Refrigerator, and it's especially designed for use on the farm.

You can see how easy it is to store *bulky* items such as big bowls—yet small jars are always in full view. That's because the *heavy-duty shelves are adjustable, sliding and removable.*

See this new, spacious General Electric Refrigerator at your G-E dealer's now. General Electric Company, Appliance Park, Louisville, Kentucky.

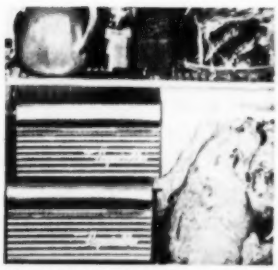
Automatic Defrosting. This new, roomy General Electric Refrigerator defrosts itself every time it needs it—automatically. No buttons to push, no clocks to set, no pans to empty. (Available with either right- or left-hand doors.)

$429.95*

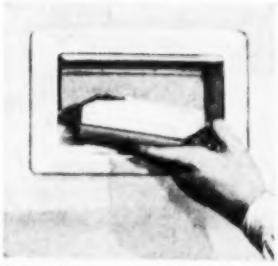
**Price for LD-113L Farm Refrigerator above. Other G-E models priced as low as $219.95. Prices and specifications subject to change without notice.*

Automatic Defrost REFRIGERATOR

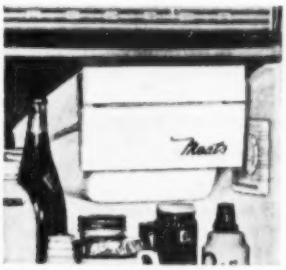
ONLY GENERAL ELECTRIC GIVES YOU ALL THIS:



Vegetable drawers can be stacked to make room for a turkey or watermelon.



Butter Compartment holds a full pound of butter, keeps it fresh and ready for spreading or mixing.

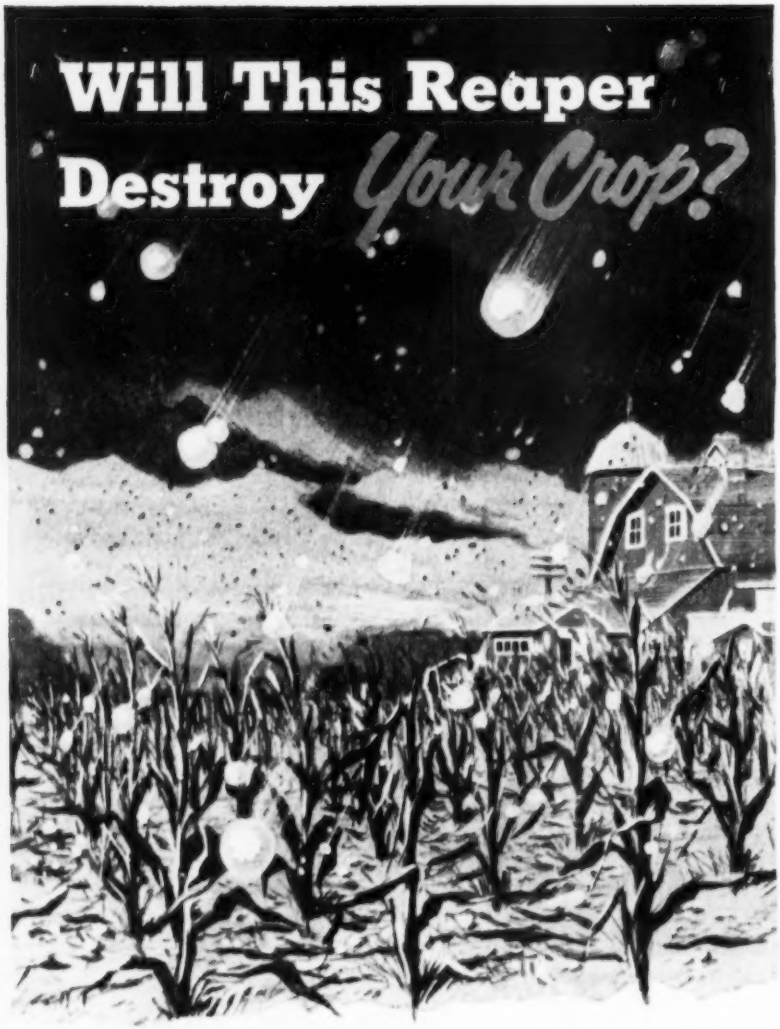


Built-in meat drawer provides ideal space near freezer section for meat storage.

- **Full-width freezer** — up to 48 packages of frozen food.
- **Mini-Cube ice tray**—cubes fit small glasses.
- **Adjustable** and **removable door shelves.**
- **Famous 5-year protection plan.**

So dependable! More than 3,500,000 G-E Refrigerators in use 10 years and longer!

GENERAL ELECTRIC



ONE MOMENT—a welcome rain. Seconds later—smashed stalks and mud. Months of hard work and a heavy investment gone to naught.

Don't be robbed of harvest profits! Get strong dependable insurance protection against loss from hail damage to your crops in companies of the America Fore Group.

Hail strikes swiftly. Protect yourself now! See your local America Fore agent today!

For the name of a nearby America Fore agent call Western Union by number, ask for Operator 25.

For Peace of Mind insure with **America Fore** INSURANCE GROUP

★ The Continental Insurance Company ★ Fidelity-Phenix Fire Insurance Company
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Farmer's Washington

From page 18

toward the elimination of such devices as part of, or supplement to, our own agricultural policy." The International Wheat Agreement was also cited as a horrible example of what the commission was talking about.

New A.C.P. program. A new conservation payments program has been developed. It may be announced by the time this appears. Secretary Benson was shooting at a program to increase seeding permanent pastures and hay by 40 million acres—and boosting the acreage of *soil-building* crops.

The general aim is to get the land—taken out of corn, wheat, and cotton by acreage allotments and marketing quotas—into permanent pasture and hay. The payments program was to be worked out to achieve that result.

Payments would be made on the basis of 25 percent of the normal *per-acre* yield of the controlled crop. Example: In a county with a 60-bushel-corn average, farmers would be eligible for subsidies on land diverted from corn *at the support level* for 15 bushels per acre. Total payments would be limited to $2,500 per farm.

Flexible supports gaining strength. Prospects for easing into the flexible price-support system are said by congressional observers to be better than when President Eisenhower and Secretary Benson first proposed their program. But general feeling in Congress still was that 90-per-cent-of-parity guarantees would remain in effect for at least another year.

One line of argument used by the administration didn't rest well in Congress. Secretary Benson roused congressional ire by *continually* harping on the high cost of the farm program, and how it had to be brought down or the public would rise in arms. Benson estimated the cost of farm programs as high as $10,000,000,000 for the period 1932-52.

Some senators said this was an *over-all* spending figure and that losses *actually* were much lower. Price-support *losses*, they said, totaled just over $1,000,000,000. While *loans* amounted to $1,756,000,000, *loan losses* were only $153,000,000 according to the senators' statistics.

Revive food-stamp talk. The old food-stamp-plan idea, which originated in the New Deal, and was to have been carried out on a large scale until the war came along, has been revived. Senator George Aiken, chairman of the senate agriculture committee, says the plan is up again for serious discussion. He has offered it seven times since 1943, but this is the first time the Department of Agriculture has encouraged him. The plan would supplement the buying power of low-income families so that they might attain a desirable diet. They would get food-allotment coupons on condition that they couldn't afford to provide themselves with an adequate diet at current prices. **END**

WHAT'LL THEY DREAM UP NEXT?

IF IT NEEDS LUBRICATION—

Your Mobilgas-Mobiloil Man has the Answer!

More versatile, more efficient, *more precisely engineered!* That's farm machinery progress in a nutshell. That's why it pays to call on a man backed by 88 years of lubrication know-how, your Mobilgas-Mobiloil man.

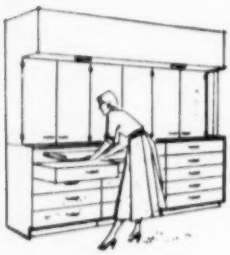
He offers you famous-brand lubricants of highest quality – Mobiloil, Mobilgrease, Mobilube gear oil – endorsed by leading farm machinery builders.

Match your big investment in farm machinery with the finest lubrication protection you can buy... Mobil Farm Products—sold by the man in the big red truck!

SOCONY-VACUUM OIL CO., 26 Broadway, New York 4, N. Y., and Affiliates: MAGNOLIA PETROLEUM CO., Dallas; GENERAL PETROLEUM CORP., Los Angeles

Bring your home up to date with these modern Curtis Cabinets

You can have a beautiful, work-saving kitchen—because Curtis wood cabinets bring you the 53 convenience and beauty features women want most. Curtis cabinets are easily fitted together for any size or shape of kitchen...and their cost will fit your budget. They are available in beautiful natural birch—or can be painted in the color of your choice, if you prefer.



Build a useful storage wall with Curtis cabinets—here's the answer to getting more storage space in dining room, in bedroom or utility room.

More room for playthings—for clothing—with easy-to-reach cabinets made up of Curtis sectional units. Sold through retail lumber dealers everywhere.

Mail coupon for complete information

1855 CURTIS WOODWORK

SF-4

Curtis Companies Service Bureau
200 Curtis Building
Clinton, Iowa

Please send me Curtis kitchen idea book. I enclose 10 cents.

Name.....

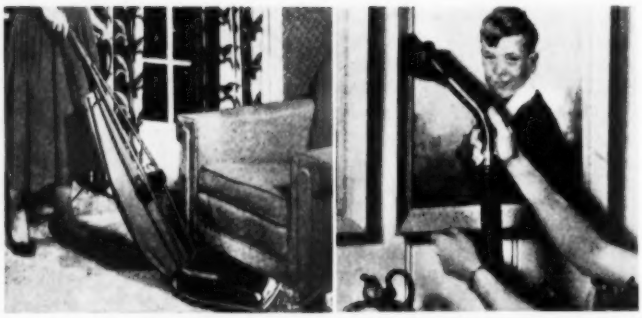
Address.....

City.....State.....

What's new *in homemaking*®

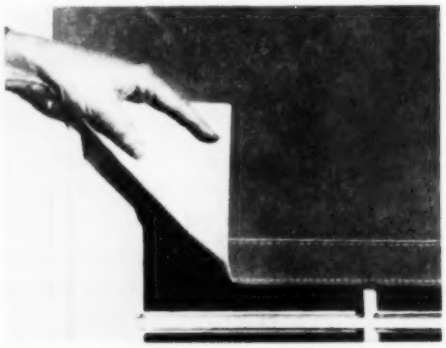
Built-in laundry unit is unusual asset in factory-built cabinets. A cabinet on wheels has wicker clothes hamper to lift out. A full-size ironing board pulls out, has no legs. Wet or ironed clothes can be hung on an aluminum rack which folds out. In seven colors, natural birch, or white. Consult dealer for price and installation.—*Kitchen Maid Corporation, Andrews, Indiana.*

A home drinking fountain can be easily installed in household lavatory. A "Faucet-and-Bubbler" combination ends unsanitary drinking cups. About $13 at plumbing dealers. —*Kohler Company, Kohler, Wisconsin.*



This vacuum cleaner, only 47⅞ inches high, goes right under low furniture. It has a "Toss-away" dust bag, and its "Attach-adapter" easily converts cleaner for use with special cleaning tools. It adjusts automatically to the thickness of the rug. About $125 at dealers.—*Westinghouse Electric Corporation, Mansfield, Ohio.*

Freezer thermometer shows temperature with freezer door closed. No installation. At department and hardware stores; about $4.50.—*Taylor Instrument Companies, Rochester, New York.*



New window shades in clean, sparkling colors bring your home spring freshness. Coated with vinyl plastic on both sides, these shades are entirely washable. Choice of five pastel colors—all are white on the outside. At stores, about $1.49.—*Clopay Corporation, Clopay Square, Cincinnati 14, Ohio.*

Enter the Gold Seal "Kitchen of the Year" CONTEST!

Barry and Babs put down handsome Gold Seal VinylTile in a marbleized design that hides footmarks.

WIN $5,000.00

Re-do your kitchen around Gold Seal Tile

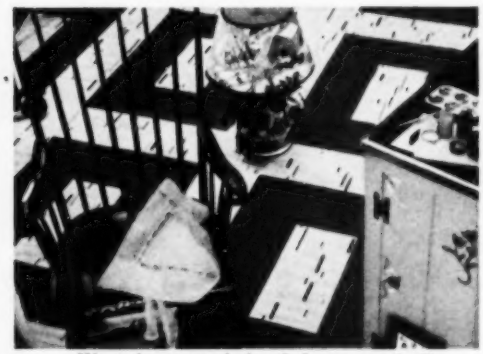
Tell us why you like the proud results!

70 other big prizes!

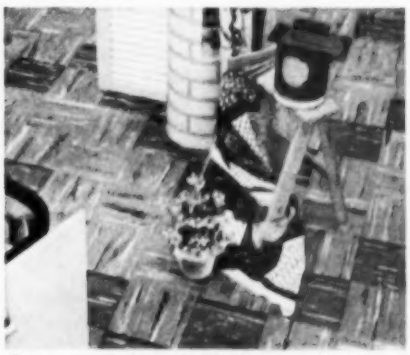
When it comes to kitchens, nothing is as important as the floor. It ties the whole room together. It can be especially easy to clean, or particularly comfortable, or exceptionally long-wearing. You'll know why you chose the Gold Seal floor you did; just tell us about it. You might win $5,000! But whatever happens, you're bound to win in the long run. For you'll have the kitchen you want—built around one of the finest floors money can buy.

Want a floor that cushions every step, sponges up sound? Choose Gold Seal Rubber Tile. The colors are the clearest, truest ever. Easy to lay—scissors cut it. Cost? About **26¢**, 9" x 9" tile.

Want a floor that's practical as a damp mop? Choose Gold Seal VinylTile. Even in these light, lovely "Bermuda Hues," it shrugs off dirt, grease, stains. Cost? About **20¢**, 9" x 9" tile.



Want decorator designs? Long wear? Choose Gold Seal Linoleum Tile. Get striking patterns like color-flecked "Jackstraw" (shown with "Fashion-Floor"). Cost? About **23¢**, 9" x 9" tile.



Got a ranch house? No basement? Choose Gold Seal Vinylbest Tile. Takes ground dampness. Even goes over concrete. Clear, true colors. Resists stains. Costs about **19¢**, 9" x 9" tile.

HERE ARE THE PRIZES—and how you can win them.

Grand prize	$5,000 cash
10 second prizes	Automatic Dryers
10 third prizes	Laundromats
50 additional prizes	Steam Irons

1. Re-do your kitchen with Gold Seal tile. Buy them from your Gold Seal Dealer. Only floors laid with Gold Seal Tile bought after March 20, 1954 can be entered in the contest.
2. On an official entry blank available at all Gold Seal floor covering dealers, complete the following statement in 50 words or less: "I chose Gold Seal (VinylTile, Vinylbest, Rubber Tile or Linoleum Tile, etc.) for my kitchen because";
3. Prizes as listed will be awarded on the basis of the decorative and practical contributions of the floor to the kitchen, and the aptness and originality of the statement. (Example: "I have 4 small children who can certainly track up a floor. Yet I was able to use coral and white VinylTile on the floor because it's so easy to keep clean.")
4. Ask your dealer to help you with your entry. Be sure to put his name and address (and your own) on the official entry blank. Indicate which titles you used on the Gold Seal Floorchart in the entry blank.
5. Contest is subject to all Federal, State and local regulations. The decision of the judges is final. All entries must be postmarked on or before midnight, July 31, 1954. Mail your entries to Gold Seal, P. O. Box 124, New York 46, New York.
6. See official entry blank for complete rules.

GOLD SEAL®

FLOORS and WALLS

Satisfaction guaranteed—or your money back. Your Gold Seal dealer is under "Linoleum" in your classified phone book.

CONGOLEUM-NAIRN INC., Kearny, N. J. © 1954.

NEW IDEA FULL TRAILING MOWER easy on and off almost any tractor. Equalizer arm and swivel bearing let you make square corners without binding, chattering or freezing of universal joints . . . saves time, protects against wear. Trails perfectly, cuts cleanly.

For a better season... Put New Idea

If you think hay tools are pretty much alike, maybe you haven't tried a New Idea. When you work with these finer tools, making hay in your own fields, you realize how efficiently they speed up your job, cut down your work. There's nothing ordinary about them. You've never worked with machines so completely practical, so reliable.

The better you know your New Idea tools, the closer you examine them, the more reasons you find that make them profitable investments. 3 rivets where 2 might have been enough; 3/16″ steel where most would use 1/8″ . . . big safety margins, more strength, longer dependable service.

When you're making hay, you want to do it *fast* . . . and at the same time

BELOW LEFT: New Idea's rugged baler will handle shredded fodder, soybean and Sudan hay. Retractable moving fingers in feed chamber handle hay with less leaf shattering or loss. Capacity increased 25%. More uniform bales; 32″, 38″ or 44″. Inclined bale chute delivers at wagon level. Throw-out lever at tractor seat stops pickup and auger while feed mechanism clears itself. Either twine tie or wire tie, the tying mechanism cannot skip or double trip.

BELOW RIGHT: This suspension-trussed, 17½″ trough, double chain elevator puts your hay away in a hurry; or your small grains, or ear and shelled corn. New Idea built it to do all your elevating and to last as long as you'll ever need it. Run it with gas engine, electric motor or PTO. Box-crimped trunk cannot bow or sag. Raises, lowers easily with safe worm and gear winch. Balanced for easy moving, storage. Available in 26′ to over 50′ lengths.

LOW-WHEELED RAKE AND TEDDER gently fluffs hay into uniform windrows. Tough stems stick out for sun-curing; tender leaves are cradled in windrow center, safe from sun's rays.

NEW IDEA SEMI-MOUNTED MOWER has built-in jack for quick mounting or detaching and storing. Spring loaded release latch protects cutter bar; simply back up to re-engage.

HIGH-WHEELED RAKE AND TEDDER with steel or rubber-tired wheels. Reel yields at both ends. High-fronted basket strips clean, no clogging. Shielded bearings. Converts to a tedder by flipping a lever.

tools on your hay team

gently. Combining speed and gentle handling is a design problem NEW IDEA has met with *exclusive* features. For instance, the NEW IDEA wire-tie baler needs only a single threading for a full season's baling. Each coil is easily knotted to the next. Knots feed right through the tying mechanism.

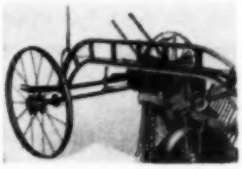
Gentle handling? Just walk around the NEW IDEA baler. You don't even need to see it in action to know that here is a machine designed to handle hay gently. Notice the straight-thru movement of hay, the hugging action in the bale chamber instead of the usual ramming: and the other advanced features typical of NEW IDEA.

To better see what we mean, read about the machines on these pages; then send in the coupon for more detailed information. Stop by your local NEW IDEA dealer and go over these machines from stem to stern. Discover for yourself why a NEW IDEA is such a *good* idea.

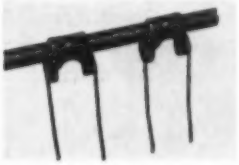
Both mowers available with hydraulic controls.

½ turn opens and closes pitman straps; locks cam.

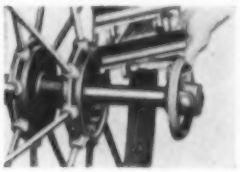
Cutter bar lead adjusts by easy turn of eccentric cam.



Trussed arch frame prevents bobbing; keeps frame and reel aligned.



Patented double curved spring steel teeth handle hay positively, give high lift.



Quick-shift wheel sets out for raking, in for turning windrows. No tools needed.

NEW IDEA FARM EQUIPMENT COMPANY AVCO

Dept. 1113, Coldwater, Ohio

SEND FREE ILLUSTRATED FOLDERS AS CHECKED:

- ☐ Full Trailing Mower
- ☐ Semi-mounted Mower
- ☐ Low-wheeled Rake & Tedder
- ☐ High-wheeled Rake & Tedder
- ☐ Twine or Wire-tie Balers
- ☐ Elevator
- ☐ All-steel wagon
- ☐ Fertilizer Spreaders
- ☐ Manure Spreaders
- ☐ Corn Pickers
- ☐ Hydraulic Loaders
- ☐ Fertilizer Guide
- ☐ Barnyard Manure Booklet
- ☐ Need for schoolwork
- I farm _____ acres

Name _____

Address _____ County _____ State _____

The new 1954 Chevrolet Bel Air Sport Coupe. With three great series, Chevrolet offers the most beautiful choice of models in its field.

How Chevrolet gets more power and more miles out of gasoline!

The new 1954 Chevrolet brings you new power *plus* new economy. You not only get increased horsepower and finer performance, but you also enjoy money-saving gasoline mileage every mile you drive. And that goes for both town and country driving.

NEW PERFORMANCE is the first thing you'll discover when you take a new Chevrolet out on the road. You get under way and pull around other cars more positively and safely. You breeze up steep hills with new ease. And as you cover the miles, you can't help but notice how long the gas gauge stays at the "full" mark. It takes a long time and a lot of miles to move over to "empty"!

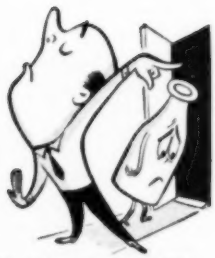
NEW HIGH-COMPRESSION POWER is the reason behind these important advantages. And you get it whether you choose a new Chevrolet gearshift model powered by the advanced "Blue-Flame 115" engine, or one with Powerglide (optional at extra cost) and the great "Blue-Flame 125" engine. Both of these engines have a compression ratio of 7.5 to 1—highest in any leading low-priced car. This means that the fuel mixture is squeezed more tightly to make every drop of gas work harder and go farther.

THERE'S MUCH MORE THAT'S NEW awaiting you in the lowest-priced line in the low-price field. New beauty, for example, and a complete choice of automatic power features. Why not plan to pay a "fact-finding" visit to your Chevrolet dealer's soon! . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

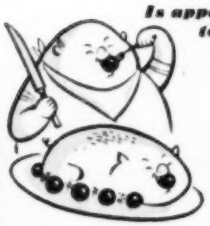
POWERGLIDE NOW AVAILABLE ON ALL MODELS! Now you can enjoy Chevrolet's own and America's most popular automatic transmission on all models in all three series. Powerglide, you know, is the *zippy, thrifty* automatic transmission with no jerks or jars to mar its smoothness. Teamed with its own special engine, Powerglide is optional at extra cost.

MORE THINGS MORE PEOPLE WANT . . . THAT'S WHY MORE PEOPLE BUY CHEVROLETS THAN ANY OTHER CAR!

SYMBOL OF SAVINGS
CHEVROLET
EMBLEM OF EXCELLENCE



Do adults need milk?



Is appetite a guide to eating?

Is what Grandpa ate good enough for you?

Are fatty foods hard to digest?

Food facts and fancies

By Ruth M. Leverton

Anything as popular as food is sure to get some fiction scrambled in with the facts, and it's difficult to unscramble the two.

For instance, you know that good nutrition is an important step toward sparkling health and zestful living. You know it comes from eating the kinds and amounts of foods that science has proved you need. But because these are ordinary, everyday foods instead of unusual, hard-to-come-by concoctions, many people think the food they eat can't be very important. Or they think they don't have to pay any attention to choosing the right foods because their appetites will guide them to eat what they need.

Both of these ideas are fiction. *The fact is that nothing influences every part of your living more than the food you eat. You are what you eat.* Every part of your body comes from your food. In addition to your size and build and your strength and stamina, food affects your happiness, your personality, your attitudes toward people and the world you live in.

You can't depend entirely on your appetite to guide you in eating everything you need. An appetite can go wrong in these times when there are foods high in appetite appeal but low in health value. It takes more skill to manage the farm machinery of today than that of 50 years ago. The same is true of making food choices. The food knowledge and skills of 1900 are not good enough for 1954. It's important to keep up with new developments in nutrition.

Here's another bit of fiction you often hear: "Our ancestors, who knew far less about the science of food and nutrition than we know, had better diets, better health, and lived to a ripe old age!" People who say this remember only the unusual cases and quote them as the rule. Perhaps they have never strolled through old cemeteries and noticed how close together the dates were on the headstones.

By every food and health measurement you can find, we Americans are much better off than ever before.

Average length of life

Year	Men	Women
1900	48	51
1949	70	76

Deaths per 100 children under 1 year

Year	Deaths
1900	162
1949	31

Our newer knowledge of nutritional needs, our improved food supply, and our advances in medical science are the powerful teammates which have made such progress possible. *More than just time has been added to our life spans. Nowadays, these extra years can be effective, productive, happy years.*

Such a rosy report may lead you to think that there's no need for further improvement. But there is.

Recently a study was made of what some typical farm and town families in the Midwest ate. There were several food deficiencies. One was probably the result of the mistaken idea that adults don't need milk. Another came from the idea that without direction a child will drink as much milk as he needs. I use this example because milk is an extremely important food for people at every age. There is no substitute for it—especially for it s mineral *calcium*, and its vitamin *riboflavin*. *An*

[*Turn to page 176*

Pot and pan tricks

Scorched pans can be easily cleaned with an S.O.S. pad. Sturdy fibres and soap in every S.O.S. pad take off burned spots—polish your pans, too.

Burned-on grease can be quickly cleaned from pots and pans with a soap-filled S.O.S.® pad. The soap cuts grease as tough fibres scour the pan.

To make pans cook best—as well as look best—polish them with S.O.S. after every use. Sturdy S.O.S. cleans fast—leaves a shine every time.

The S.O.S. Company, Chicago, Illinois, U.S.A.
S.O.S. Mfg. Co. of Canada, Ltd., Toronto, Ont.

GAY times and scenic splendour combine in the friendly holiday havens of Canada.

FAIRS, festivals and pageantry add to the vacation allure of picturesque provinces.

This year: **Canada!**

VACATIONS UNLIMITED

LIVE WITH NATURE'S LOVELINESS IN GREAT NATIONAL PARKS . . . LINGER IN GREEN LAKELANDS

Holiday in the land with the "faraway" flavour that's actually your next-door neighbour. Canada is fascinatingly new, yet conveniently near—you can enjoy its wonders on an ordinary budget of travel dollars and days. Explore interesting, cosmopolitan cities . . . historic towns . . . a fresh and fabulous outdoor setting for summer fun. It's all just over a friendly border and no passports are required. See your travel or transportation agent soon; send the coupon now.

Get this beautiful Free Book!

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CANADIAN GOVERNMENT TRAVEL BUREAU, OTTAWA, CANADA

Please send your 48-page, full-colour book on vacation attractions in all parts of Canada . . . . . ☐

Tell me where 16 mm sound films on Canadian travel subjects are available in the U.S.A. . . . . ☐

Check ✓ as required

Name _____
PLEASE PRINT

Address _____

Town _____ *State* _____

How corn champ grew 198 bushels

A 1953 average corn yield of 198 bushels, and a 3-year average of 196 bushels, is the record of J. Herbert Roadruck, White County, Indiana, winner of the 1953 Indiana 5-acre Corn Contest.

Here's how he did it:

Roadruck grew his 198-bushel record in a 21-acre field. Last year the field was in a mixed grass-legume pasture, and it was manured twice before plowing. Prior to planting, the field was disced three times and harrowed twice.

Roadruck planted his corn on May 15 at 8-inch intervals in 39.5-inch rows. He cultivated once with a rotary hoe and twice with a tractor cultivator.

Roadruck applied a total of 1,390 pounds of fertilizer per acre. He plowed under 350 pounds of 60-percent potash and 360 pounds of 47-percent phosphate per acre, the equivalent of 1,000 pounds of 0-21-17 analysis. He also put 250 pounds of 4-16-16 in the row when the corn was planted.

The corn was side-dressed on June 25 with 140 pounds of anhydrous ammonia to the acre, the equivalent of 115 pounds of nitrogen to the acre. Roadruck is convinced that heavy fertilization for corn is profitable if it is used along with other essential agronomy practices.—*O. E. Ackerson, Indiana.*

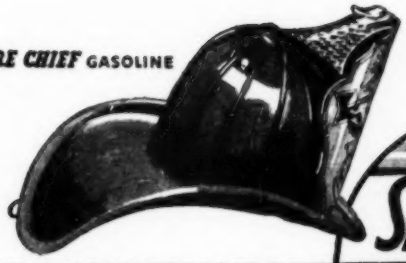
Help for farmers with heart disease

A research project is being set up at Purdue University laboratories and at selected Indiana farms to determine ways of easing the work load for farmers with heart disease.

The Indiana Heart Foundation is joining with Purdue University and the Indiana State Board of Health in financing a $130,000, five-year study to provide information on time- and energysaving short cuts for the cardiac farmer. Dr. Lowell Hardin, agricultural economist at Purdue University, and Dr. M. X. Zarrow, professor of physiology, are directing the project.

A mobile laboratory will house equipment necessary to make the various field tests. The unit will be transported from farm to farm.

TEXACO *FIRE CHIEF* GASOLINE



Sky Chief GASOLINE

TEXACO *Sky Chief* GASOLINE

Only TEXACO *Sky Chief* AND *FIRE CHIEF* GASOLINES . . .

are 100% *CLIMATE-CONTROLLED* in all 48 states

Climate, altitude and season affect more than crops – they affect gasoline performance. That's why Texaco engineers analyzed more than 40 years of weather records, divided the United States into 25 weather areas, then scientifically blended Texaco Sky Chief and Fire Chief gasolines for climate, altitude and season in each one of these areas.

The result is that right in your own area or wherever you fill 'er up, you get from *Climate-Controlled* Texaco gasolines lively starts, smooth get-away, extra power to take hills in stride.

Try a tankful in your car and truck—Texaco Sky Chief, the premium gasoline for those who want the best, or Fire Chief, the *best-performing* regular-priced gasoline you've ever used.

Drive in to your Texaco Dealer, *the best friend your car and truck have ever had.*

THE TEXAS COMPANY

TEXACO DEALERS

IN ALL 48 STATES

Texaco Products are also distributed in Canada and in Latin America

TUNE IN . . . Metropolitan Opera radio broadcasts every Saturday afternoon. See newspaper for time and station.

More alfalfa with SPERGON®!

More money for you!

Spergon Seed Protectant can increase your alfalfa yield substantially for many more market dollars. By preventing seed decay, "damping off" and other fungus diseases, Spergon is your best insurance against the risks of cold, wet planting weather.

Spergon lets you plant less seed and lubricates that seed for less breakage and easier planting. It works very effectively with legume inoculants and is non-hazardous.

Order Spergon or formulations containing Spergon from your local supplier today and watch your profits grow.

Naugatuck Chemical

Division of United States Rubber Company
ELM STREET, NAUGATUCK, CONNECTICUT
producers of seed protectants, fungicides, miticides, insecticides, growth retardants, herbicides: Spergon, Phygon, Aramite, Synklor, MH, Alanap.

Welcome mat for wood ducks

Ask these gorgeous birds to dinner. They're good looking, and good eating

By Erwin A. Bauer

Only a decade ago, wood ducks had almost disappeared from the American scene.

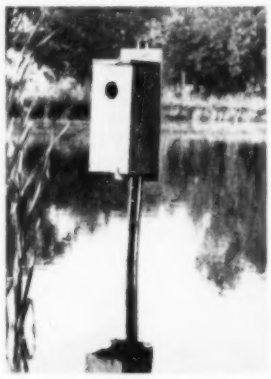
Woodies nested near water in hollow trees—and only as many survived as could find lodging in the rapidly diminishing forests. Today, that's all changed. Once again, these beautiful ducks are numerous along meadow brooks, in marshy places, and on farm ponds.

The change wasn't the result of a miracle. In Ohio, farmers cooperated with state conservation authorities in a "housing" program for the ducks. In return, their families enjoyed the brilliant plumage and shy antics of woodies in summer—plus roast duck to eat in winter.

Attracting woodies is easy. Just locate a box near a farm pond or slough, then wait for a hen to set up housekeeping. Almost any kind of scrap material can be used for the boxes. *Never paint them.*

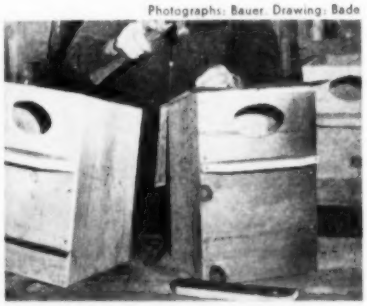
The boxes should be erected over, or as near the water as possible, and from 8′ to 10′ high. The best location is on a pole or tree completely surrounded by water. This discourages occupancy by owls—and raids by coons, possums, or other predators. The entrance hole should face downwind, and the box should be half filled with wood shavings or very coarse sawdust.

Home, sweet home in a sycamore. Woodies naturally build nests in hollow trees

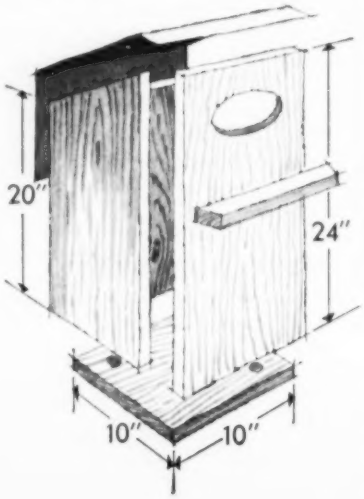


Home, sweet home in a nesting box. Placing box over water protects the ducklings

Photographs: Bauer. Drawing: Bade



Roof is nailed on nesting box by instructor in an Ohio vo-ag class. Housing program for wood ducks is a fine project for 4-H Clubs, F.F.A. chapters, Boy Scouts



Simple, low-cost nesting box is shown at left. Hole can be round or square, but should be 4″ in diameter. Detailed plans for a similar box can be obtained by writing a letter to the Ohio Division of Wildlife, 1500 Dublin Road, Columbus 12, Ohio

What will your next wheat crop be worth?

The average wheat price at harvest time for the last ten years has been $1.97 a bushel.*

But farmers who have stored their crops until April each year have averaged $2.20 a bushel!

You can be sure of safe storage if you condition your small grain, corn or hay with a mechanical dryer and store it in a steel building. High moisture, fire, rodents or weather won't rob you of profits. You can harvest earlier with less field loss because you control the drying "weather."

Special Armco Steels used in storage buildings, crop dryers and other equipment help add to profits. These steels were developed especially for certain kinds of uses. That's why they perform better and last longer.

For example, Armco ALUMINIZED Steel in crop dryers reflects heat more efficiently, resists heat damage.

Look for the Armco trademark on farm equipment. It's your assurance of special steel value.

*Based on weighted price of No. 2 Hard Winter Wheat at Kansas City, Mo.

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MIDDLETOWN, OHIO • THE ARMCO INTERNATIONAL CORPORATION, WORLD-WIDE

YOU'RE MONEY AHEAD WITH PRODUCTS MADE OF ARMCO SPECIAL-PURPOSE STEELS

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Reader's Digest Reports:

ONLY NEW COLGATE DENTAL CREAM

with Miracle Anti-Enzyme Ingredient GARDOL*

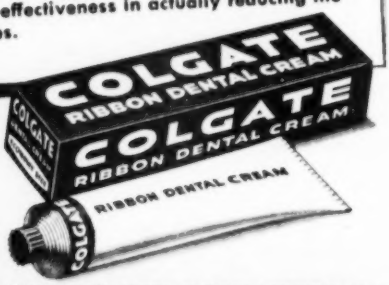
HAS THE CLINICAL PROOF!

(Proof that Brings New Hope to Millions for LIFETIME PROTECTION AGAINST TOOTH DECAY)

5 QUICK FACTS FROM THE READER'S DIGEST ARTICLE

"What About Anti-Enzyme Toothpastes?" December, 1953

1. **Reader's Digest** says—The most effective anti-enzyme toothpaste ingredient tested was developed in the Colgate laboratories.
   (It's Colgate's miracle ingredient Gardol (Sodium N-Lauroyl Sarcosinate)—found in no other leading toothpaste!)
2. **Reader's Digest** says—One of the foremost dental authorities in the world proved that this ingredient binds itself effectively to the teeth—holds acid formation below the decay level in 95 per cent of cases tested.
   (Unlike ordinary toothpaste ingredients, effective only for minutes, this protection won't rinse off—won't wear off—all day or all night!)
3. **Reader's Digest** says—Even 12 hours after brushing, this new Colgate anti-enzyme discovery continues to guard against the enzymes that cause tooth decay.
   (Thus, regular morning and night use guards against decay-causing enzymes every minute of the day and night!)
4. **Reader's Digest** says—In full-year clinical tests, supervised by leading dental authorities—4 out of 5 of the people who used New Colgate's with Gardol developed no new cavities at all!
   (Distinguished dentists examined this evidence and agreed—New Colgate's with Gardol gives the surest protection against decay ever offered by any toothpaste!)
5. **Reader's Digest** says—New Colgate Dental Cream is the only toothpaste with clinical proof of its effectiveness in actually reducing the formation of new cavities.



NOW! NEW COLGATE DENTAL CREAM CONTAINS GARDOL (*SODIUM N-LAUROYL SARCOSINATE)

***For* LIFETIME PROTECTION AGAINST TOOTH-DECAY ENZYMES**

Latest report on Clothes dryers

By Florence Ehrenkranz
Iowa State College

The usual load of clothes weighs only 8 pounds *dry*, but comes out of your washer weighing from 12 to 18 pounds! That means—if you don't have a dryer—the clothesbaskets you lift in a year may make up a *staggering, fatiguing* total weight. This is one of the facts brought out in a recent study on washers and dryers made at the Iowa State College Experiment Station.

Three kinds of automatic washers and one wringer-type washer were used in the experiment. The dryers tested were both gas and electric.

Here is some additional information brought out in the tests:

1. The kind of dryer you buy—gas or electric—probably will make no important difference in the *speed* of drying clothes. The gas and electric models used in this test were about equal in speed.

2. The kind of washer you use *will* make a big difference in the time it takes a dryer to do its job. That's because some washers leave more water in the clothes. In this study, the automatic washer with the fastest "spin-dry" action took out nearly 4 pounds more water than the one with the slowest spin. The wringer washer, though the wringer was adjusted to its tightest setting, left up to 5 pounds more water in a load of clothes than did the fastest-spinning automatic washer.

3. The type of clothes in a wash load also makes a big difference in drying time. For instance, this experiment showed that a load of work clothes may take as little as 30 minutes to be dry enough to put away. But a load of bath towels can be expected to take 50 minutes or more.

4. The cost of operating either a gas or an electric dryer is small for the tremendous service it gives. An average drying time—for all types of clothes, washed in any of the washers tested—is about 40 minutes. The Iowa State study showed that the electric dryer used, in a 40-minute period, 2.7 kilowatt hours of electricity. The gas dryer used 10.9 cubic feet of natural gas. (Only about $\frac{1}{3}$ this much bottled gas would be required.) **END**

Do you have a favorite housekeeping short cut? *Successful Farming* pays $5 for each suggestion published. Send your hints to: All Around the House, *Successful Farming*. The unused suggestions cannot be returned.—Editors.

Americans are in the midst of a great renewal of religious interest

SINCE 1940, membership in religious congregations has increased by 27 millions—over twice the rate of our population growth.

During this period, thousands of places of worship have been built. There's been an increase of 40,000 active clergymen.

More Bibles were published in the decade between 1940 and 1950 than in the previous 40 years.

The vast audiences of religious radio and television programs also reflect our growing spiritual interests.

Although we Americans have made great gains in our material possessions, it is the renewal of *spiritual* interest that adds meaning and significance to these material gains.

The stability of our families and homes, as well as the progress of the nation, have their roots in moral and spiritual values. We in America have always enjoyed freedom of worship and it is of tremendous importance that we are more actively using this opportunity.

Institute of Life Insurance

Central Source of Information about Life Insurance

488 MADISON AVENUE, NEW YORK 22, N. Y.

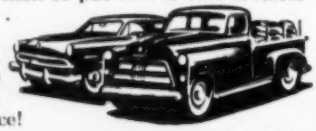
Purolator's tips for
FARM MECHANICS

Clogged crankcase breather can cause serious trouble

Crankcase breathers must be kept clean! The screen-type crankcase breather filter, and the filter located in the oil filler cap, have a very important job to do. Every time you start your engine, the air in the crankcase becomes warm and expands. If it cannot escape through the breather filters, pressure builds up in the crankcase. When this happens, oil may be forced into the clutch housing, causing slipping that only an expensive take-down job can cure. A few other things that can happen . . . corrosion from trapped gases and water vapor, hard starting, increased fuel consumption, overheating.

Change oil filter refills regularly, too. It's never wise to gamble your machinery investment against the few pennies you might save by skimping on oil filter refills! Clean oil makes engines last longer, burn less fuel, cost less in repairs . . . and only a fresh refill *of the proper kind* can be relied on to keep engine-damaging dirt and sludge out of the oil stream. When buying oil filter refills, follow your manufacturer's recommendations. Don't accept substitutes. A filter of the wrong type or substandard quality can ruin an expensive engine.

Use Purolator* refills in cars and trucks, too! Famous Purolator Micronic* refills—made by the *originators* of automotive oil filters—trap dirt particles so small you can't see them; have up to *ten times* more filter area than old-style filters. Next time you have oil changed, tell your service man to put in a fresh Purolator refill . . . priced low, but the best at any price!



*Reg. U. S. Pat. Off.

PurOlator
World's Finest **OIL FILTER**

Every three weeks, irrigated sudan grew 2½ feet. The Palmers chopped grass and hauled it to cattle. Twenty acres fed 80-cow dairy herd from July 15 until September 15

17 tons per acre from irrigated pasture

By Art Edwards

The Palmer brothers, Clarence and Jack, of Lincoln County, Missouri, sunk $7,200 into an irrigation setup last year—but their returns from it were fantastic. They got 17 tons of green sudan per acre; 2½ *feet of new pasture growth every 3 weeks.*

The Palmers seeded 20 acres of sudan grass on June 20. Just as the grass began coming up, it was watered once. (They can irrigate about 8 acres daily with 4 moves.)

Within 3 weeks the sudan was 2½ feet high. It was cut daily and fed green to the milking herd.

The Palmers estimated that they hauled about 270 tons of feed to their 80 cows. Another 100 tons went into the silo. And on September 15, they turned the entire cow herd into the pasture and let them graze until the first frost. Valued at $10 per ton, the 370 tons of feed plus the pasture paid a good share of the dam and equipment cost the first year.

The Palmers' only regret is that they didn't get the system sooner. Their 25 acres of renovated pasture next to the lake failed because of the dry weather.

The Palmer brothers figure that some irrigation will pay every year—they always have at least one short drouth.

Their irrigation system, along with the more than 21 acre-feet of storage capacity supplied by the lake, will allow them to concentrate their pasture crops within the 50-acre area, partly in permanent pasture, partly in sudan grass.

Seven-acre pond is Palmers' water source. Equipment includes tractor-powered pump, quarter mile of pipe, plus sprinklers. The pond cost $5,000, equipment $2,200—but 370 tons of feed in '53 gave them a head start in recovering investment

NOW! 5 MM HARVESTORS to give you these money-making advantages!

One man and the MM "69" make a threshing crew that's hard to beat. Light weight, light draft, straight-through design, and full length separation mean a fast, clean, low cost job in every crop.

'69'

SELF-PROPELLED

Now with POWERflow steering, and POWERflow drive, this mighty MM "S" Self-Propelled Harvestor offers a host of exclusive new MM advantages. Available in 12, 13-, and 14-foot sizes.

UNI-HARVESTOR

Powered and propelled by the MM Uni-Tractor, this MM Uni-Harvestor combines your crops at a new low cost. The same Uni-Tractor also mounts the Uni-Forager, Uni-Husker and Uni-Picker Sheller.

'88'

Packed with new MM Firsts to stretch yields . . . cut costs! One-piece header, 3-chain raddle feeder conveyor, adjustable tread, and 8 cylinder speeds are typical advantages.

Big capacity, light weight, and outstanding performance make the MM G-4 Harvestor biggest seller in the 12-foot size. Built for either one- or two-man operation . . real efficiency.

'G-4'

HERE'S PERFORMANCE THAT TOPS THEM ALL!

When you buy *any* of these 5 MM Harvestors, you buy performance that gets *all* your crop . . . gets it *clean* . . . gets it into the truck box in the *shortest possible time* . . . and at the *lowest possible cost*. You buy advantages that only the builders of the original, light-weight, big-capacity combine can offer . . . advantages that *keep* MM Harvestors —and Harvestor-owners—ahead of the field!

CLEAN, THOROUGH THRESHING IN EVERY CROP!

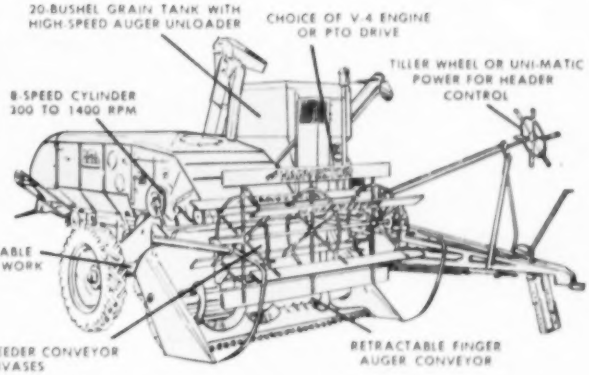
In grain, bean, or seed crops, MM Harvestors leave a clean field behind you . . . put top yields in the grain tank. MM headers travel as low as 2 inches above the ground to pick up flattened grain . . . high-speed MM sickles shear the crop with less shock and vibration. Rasp bar cylinders and the exclusive MM all-steel, one-piece welded concave and grate thresh with a thorough, gentle "rubbing" action. Fish-back channels in the exclusive MM grain pan prevent bunching of grain . . . give you the same thorough cleaning on level and rolling land.

CUT FIELD TIME . . . SLASH JOB COSTS!

Standard equipment on every MM Harvestor (unless you specify otherwise) is a high-speed auger unloader that empties the grain tank in 60 to 90 seconds. This advantage alone, can save you up to 2¼ hours of precious time every harvesting day!

Before you buy *any* combine, see your MM dealer for complete facts on *all* the money-making advantages MM Harvestors can give you.

"88" HARVESTOR SHOWS ADVANTAGES TO LOOK FOR

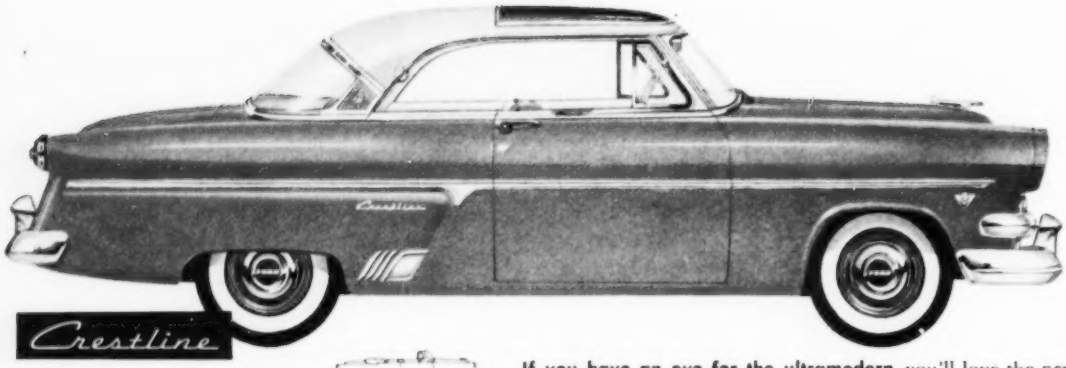


WRITE FOR THESE FREE FOLDERS!

- ☐ SELF-PROPELLED "S"
- ☐ "69" HARVESTOR
- ☐ UNI-HARVESTOR
- ☐ "88" HARVESTOR
- ☐ "G-4" HARVESTOR

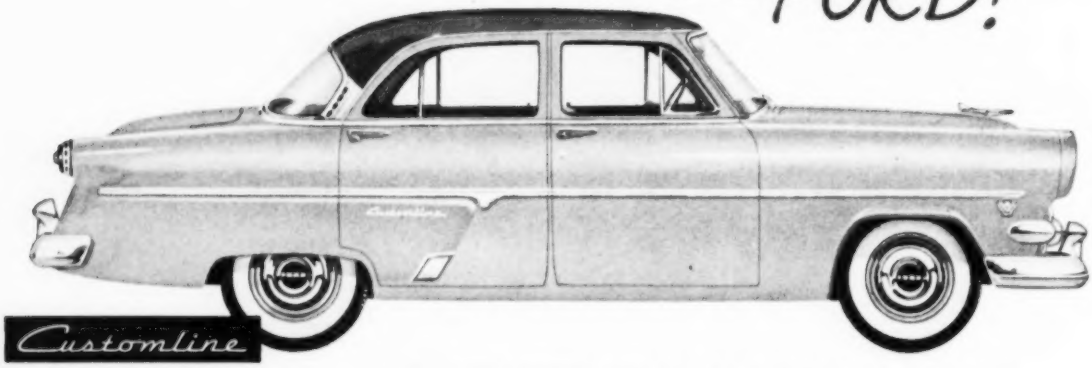
Check the folders you want above. Clip out this box, paste it on a postcard, and mail today with your name and address. No obligation.

MINNEAPOLIS-MOLINE
MINNEAPOLIS 1, MINNESOTA

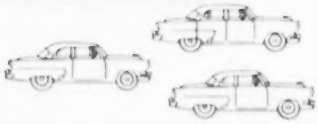


If you have an eye for the ultramodern, you'll love the new Ford Skyliner—the all-new Crestline Fordor, too. Clean, honest lines and smart, colorful interiors mark *all* '54 Crestline models as cars that "belong" anywhere. Other body styles are the distinctive Victoria, the Country Squire, and the Sunliner, America's favorite convertible.

You can have just the kind of car you want in a FORD!



If you want something extra special in its field, you'll be right at home in a Customline Fordor. Like Crestline models it's available with power steering, power brakes, power windows *all around*, 4-way power seat, Fordomatic. The Customline also offers a 4-door Country Sedan, 2-door Ranch Wagon, Tudor Sedan and Club Coupe.



If your interest is Ford's basic engineering advances, you'll like the '54 Mainline models—the Ranch Wagon, Tudor and Fordor Sedans and the Business Coupe. As in all Fords, you choose from the new 130-h.p. Y-block V-8 or 115-h.p. I-block Six. And you ride on Ball-Joint Front Suspension—greatest chassis advance in 20 years.

Your Ford Dealer cordially invites you to Test Drive the '54 FORD and select the exact model of your choice.

In this exclusive interview, John H. Davis, assistant secretary of agriculture, says that while farm exports are being pushed, the . . .

"World market won't solve our problems"

Q. Mr. Davis, is the decrease in farm exports during the past year or two a *major* cause of lower farm prices?

A. Of course, the direct cause of our lower farm prices is that American agriculture has *more to sell* than the market is taking.

For some commodities, such as wheat and cotton, existing surpluses are largely the result of *expanded* production for war needs—coupled with current *reduced* foreign outlets. This has caused stocks to build up.

For some other items that we don't normally put in the export class—such as corn, livestock, and dairy products—*domestic* factors are more important.

Although the export situation affects some farm products *more directly*, it also has an *over-all* effect on our whole farm economy. A strong flow of exports brings in more income, permits greater flexibility and efficiency in production, and strengthens our domestic markets.

Q. Does the recent upward trend mean the loss of our foreign markets has now halted?

A. We hope so. Starting with the middle of 1953, our foreign agricultural markets have been picking up rather well, and if they continue to hold up as we expect they will, the future should be brighter.

I don't mean that we can realistically expect to get back to the abnormally high levels of agricultural exports that we had during and right after the war—because those were largely *subsidized* exports. But we are working toward a fairly solid movement of farm exports at a rate *considerably above prewar*.

Q. Can we hope to regain some of the markets we have lost?

A. Yes, we are trying now to get back into some of the markets that have been more or less closed to us. One of our first objectives is to try to remove any foreign import discrimination against our farm products, so that we can compete in world markets on the same basis as exporters from other countries.

Q. What specific plans does your Foreign Agricultural Service have to boost our farm exports?

A. We have been expanding both the size and scope of work of our Foreign Agricultural Service in recent months.

- We are sending out a number of marketing experts to foreign countries. They are looking directly into marketing trouble spots, and reporting back to us and the agricultural trade on what they find.
- We are organizing informal discussions with foreign ministers of agriculture to exchange views and develop ideas on the use of farm surpluses and stockpiles.
- We are sending a series of trade missions to various parts of the world—Europe, Asia, and South America—to take a first-hand look at possibilities and see what can be done to work out effective answers to the foreign-trade problem.
- We are also working with private traders so that they may step up their own efforts to expand sales of United States products at fair prices.
- We are cooperating closely with the Foreign Operations Administration—in its program to use our surplus agricultural supplies in its technical and economic assistance work, in place of dollar aid.
- And we are prepared, of course, to give fullest assistance in carrying out the president's proposal that $1,000,000,000 worth of surplus commodities be used over the next three years in our various foreign-aid programs.

Q. How much real help do Foreign Operations Administration and similar programs give us?

A. Such programs can be very helpful, especially in getting around currency-exchange problems and in giving a boost to agricultural imports of underdeveloped countries whose purchasing ability is low.

We can't expect to build long-range trade on emergency or short-term programs such as these, but they do have their useful place and they can help move our farm products.

The new programs—especially the pres-

[*Turn to page 38*

Plain Talk about the Best Oil for Your Car

The motor oils recommended for many cars today are HD (High Detergency) oils containing additives.

Additives help keep your engine clean, prevent rust deposits . . . do many useful jobs for certain types of motors.

But additives, in themselves, do not lubricate.

They can be added to any oil.

To very good oil.

To very poor oil.

The quality of the basic oil is what determines the kind of lubrication your motor gets.

That's why . . .

Today's BEST oils start with Nature's BEST crude

Pennsylvania Motor Oils are endowed with outstanding natural toughness.

Skillfully refined from Nature's best crude oil *and fortified by carefully selected additives,* they stand up longer against the demands of modern engines.

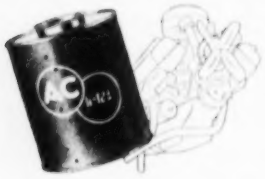
Keep the power you bought

***INSIST* on a brand of**

PENNSYLVANIA Motor Oil

PENNSYLVANIA GRADE CRUDE OIL ASSOCIATION
Oil City, Pennsylvania

Animals Protect Themselves



CAR ENGINES NEED THE EXTRA PROTECTION OF AC *ALUVAC*

Small but vicious enemies attack your farm engines, too—a dozen kinds of dirt and metal bits that can be recirculated in your engine oil. AC *Aluvac* traps them all—the dirt and sludge that clog rings and valves—the abrasives that wear pistons, cylinder walls and other precision moving parts. Renew the efficiency of your oil filters regularly by replacing with new AC *Aluvac* elements.

Aluvac's large filtering area and small filtering pores—make it the finest engine protection available.

AC OIL FILTERS WITH ALUVAC ELEMENTS

Standard Factory Equipment on Cadillac

Standard or Optional Factory Equipment on CHEVROLET, BUICK, OLDSMOBILE and GMC

AC SPARK PLUG DIVISION GENERAL MOTORS CORPORATION

World market

From page 37

ident's proposal for making $1,000,000,000 of surplus commodities available to back up foreign economic and technical-development work—should help American agricultural exports while contributing to a stronger world economy.

Q. Do our high import tariffs on *nonfarm* products reduce ability of foreign countries to earn dollars with which to buy food from our farmers?

A. It certainly is true that we have to *buy from our foreign customers* if we expect them to *buy from us*—and to the extent that our import tariffs are unnecessarily high, it reduces the purchasing ability of the foreign countries to whom we'd *like* to sell.

If international trade is to be on a lasting basis, it must flow on a two-way street. It must include not only farm products, but also industrial goods, raw materials, and so on.

Q. Can we get around fears of our foreign farm friends that we will "dump" our "surpluses" abroad?

A. "Dumping" means selling *below domestic prices* in order to do cut-rate pricing in the foreign markets. In other words, it means getting rid of surpluses by marking down the export price tag so low that foreign buyers get very attractive bargains.

If "dumping" is made a general practice by any country with a tremendous volume of commodities involved, it can *wreck* established world trade and can *badly hurt* domestic agricultural prices all over.

The only way to get around fears of "dumping" is not to dump. This does *not* mean, however, that we should not try to be competitive.

Q. Can we expect further gifts of "surplus" foodstuffs—such as to Pakistan and East Germany—to be used in making friends abroad?

A. I believe that it has become the permanent policy of the United States to help out with food wherever and whenever there is critical need abroad. Time after time, in this century, we have helped to feed hungry foreign people, and I'm sure we'll continue to do so.

Q. How much do you hope to accomplish through *all* these programs—present and planned?

A. Our principal long-range aim is to firmly establish the United States in the world agricultural market, on a basis of consistent volume and stable prices. We are trying to help the world increase its total trade—and in that trade we expect to have our fair share.

For the shorter term, we are working to reopen and maintain existing markets, and move into them as much as possible of our existing surpluses.

In my opinion, however, it is asking too much of the world market to *solve* our present emergency farm problems. **END**

B.F.Goodrich

Power-Grip tractor tire—built bigger all around to deliver more power!

"Up to 60% greater traction than other makes"

Lester Nittler farms 250 acres in the Rio Grande Valley near Elsa, Texas. He demonstrates above why he says B. F. Goodrich Power-Grip tractor tires give him 50% to 60% greater traction by easily pulling a 3500-lb. chisel through hard pan. Power-Grip cleats have a bigger face area to press against the soil. You get more working power in the field, maximum traction in reverse or forward.

"You don't get slippage so you don't get wear"→

"When a tire starts to slip," says Roy Cheatham of Laveen, Ariz., "it's going to wear out faster." Cheatham reports Power-Grip tires give greater traction and wear longer. Massive Power-Grip shoulders are square cut to defy slippage, reinforced to bite without bending. Every turn of these powerful B. F. Goodrich tires counts for full traction.

"Better service than from any other truck tire"

Stanton Atterholt hauls farm products and livestock in his truck over fields and back roads as well as the highways near Jeromesville, Ohio. Atterholt uses Heavy Duty Express tires for this varied work, reports they give better service than any other tires he's used. There's a money-saving B. F. Goodrich tire built for *your* farm truck. See your B. F. Goodrich retailer. His address is listed under Tires in the Yellow Pages of your phone book. Or write *The B. F. Goodrich Company, Tire & Equipment Division, Akron 18, Ohio.*

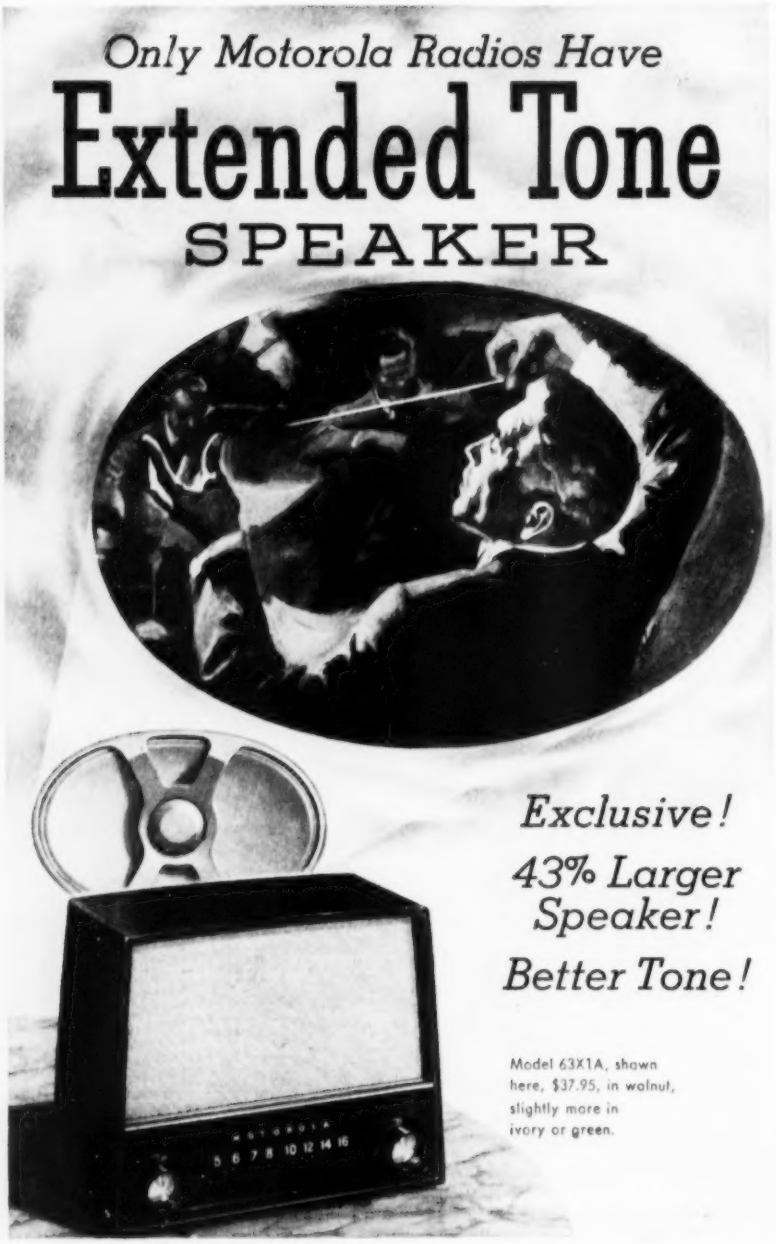
"Pulls out of mud easier than any tire I've used" →

So says William Miller of Stockham, Neb., about BFG Power-Grip tires. Power-Grip cleats are open at the center, so the tread stays clean. Only clean tires can give you full traction. Count the cleats on leading makes. Time after time you'll find that size for size this B. F. Goodrich tire has more cleats. And no other tire is wider than Power-Grip. A wide tire with plenty of cleats pulls through even the softest going.

RESEARCH KEEPS B.F.Goodrich FIRST IN RUBBER

Only Motorola Radios Have

Extended Tone SPEAKER



Exclusive!

43% Larger Speaker!

Better Tone!

Model 63X1A, shown here, $37.95, in walnut, slightly more in ivory or green.

The Motorola miracle that adds new richness to the Golden Voice of Radio!

At last—a bigger speaker in a smaller set! Richer, fuller tone, in smarter, more compact, lighter-weight radios. Only Motorola's exclusive Extended Tone speaker can give you such console quality in table models, portables and clock radios.

Better See The "MOTOROLA TV HOUR" on ABC-TV, Tuesday evenings in most cities.

Better See Motorola Radio

Prices subject to change without notice. Slightly higher South and West. "Golden Voice" Reg. T.M. © 1954, Motorola Inc.

Do it today . . .

Make your own band seeder

By Milo B. Tesar
Michigan State College

For $10 or less—and a few hours of your time—you can convert any drill with a fertilizer attachment into a band seeder.

The idea of placing the seed in a band over fertilizer, containing phosphorous, will give better legume seedings with $\frac{1}{5}$ to $\frac{1}{3}$ less seed. Tests at the Ohio and Michigan stations and the United States Department of Agriculture show that small legume seedlings need the "shot in the arm" from phosphorous to make rapid early growth.

Here are the important points:

1. You'll want the band of legume seed about 1 inch wide directly over the fertilizer and grain which go down the same tube on most drills.

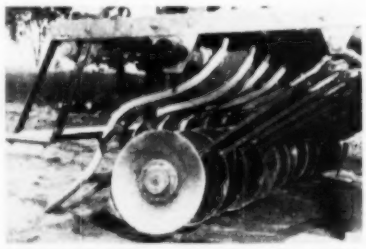
2. Place the seed about 15 inches behind the fertilizer shoes to be sure it is not covered by soil.

3. Keep the ends of the legume-seed tubes from $1\frac{1}{2}$ to 3 inches above the soil. Seed will scatter if the end of the tube is too high above the soil.

4. Remove covering chains, as they scatter the seed too much.

5. Cultipack after seeding to cover seed unless soil is heavy and likely to crust.

A flexible spiral tube and a steel pipe, conduit tubing, garden hose, or plastic tubing can be used. Keep in mind that the attachments must permit normal raising and lowering of the drill. Use a piece of strap iron to keep the seed tubes aligned.



Flexible tubing enables you to make the curves necessary to place the seed behind drill. Strap-iron braces hold tubes rigid

Place end of seed tube about 15 inches behind fertilizer shoe, $1\frac{1}{2}$ to 3 inches above the soil. Remove the covering chains

Meet the one heating expert who can save you up to 25% on fuel oil

...AND GUARANTEE IT IN WRITING!

This man offers you money-saving magic! He is your Timken Silent Automatic Direct Factory Dealer. He can cut your fuel oil bills more than any other dealer in the heating business!

Why? Because he is authorized to sell, and trained to install the amazing Timken Silent Automatic Wall-Flame Oil Burner—which in test after test, home after home, has cut fuel oil bills up to 25% and more!

As an authorized, factory-trained heating expert, he will scientifically test your heating plant. Then he will tell you how much fuel oil you can expect to save by replacing your gun-type burner with a new Wall-Flame Burner. If you decide to buy, *he'll guarantee the fuel oil savings in writing!*

If you heat with coal, this guarantee is important to you, too. For you are assured the same fuel economy, proved over other types of oil burners in home heating tests everywhere!

Let him show you this revolutionary principle of oil heating. Completely quiet, clean, and with only one moving part, this amazing burner blankets your heating plant walls with a natural, unhurried, blue-hot flame. Nothing to get out of order.

Phone your local dealer today for a free fuel-saving estimate! He is listed in the "yellow pages" of your phone book. Remember: *your home is like no other*. That is why it will pay you to get his expert advice and counsel. Hundreds of Timken Silent Automatic Wall-Flame Oil Burners have already paid for themselves in fuel savings.

Make the "Match Test"!

Form a circle with thumb and index finger. Hold lighted match in center. Move match closer to either finger. At what spot is the flame hottest? Now, see "A" and "B."

A. Conventional oil burner flame in center—far from heat absorbing surfaces.

B. Wall-Flame blankets heat-absorbing surfaces—gives fast, economical heat.

World's finest oil burner! Scientific placement of flame, plus complete preparation of the air-fuel mixture, results in unequalled efficiency and oil savings.

A complete line of oil and gas furnaces, boilers, conversion burners and water heaters for every home heating need. No down payment. 36 months to pay. Sold only by factory-trained heating experts.

TIMKEN
Silent Automatic
OIL HEAT
TIMKEN SILENT AUTOMATIC DIVISION
ROCKWELL SPRING AND AXLE COMPANY · JACKSON, MICHIGAN
The Timken-Detroit Axle Company of Canada Ltd. Toronto, Ont.
Accepted Standard

FREE! SEND COUPON FOR FACTS TODAY!

Timken Silent Automatic Products
Timken Silent Automatic Division
Dept. SF-44, Jackson, Michigan

Show me how homeowners in my community have saved fuel with Timken Silent Automatic.

Name _____

P. O. _____

Route _____ County _____ State _____

Also facts on (type of equipment) _____
(Students, check for special data) ☐

Everyone's Telling Everyone...

A Product of General Foods.

For only a fraction of a cent **Calumet** Baking Powder insures baking success!

GIVE YOUR DOG COMPLETE NOURISHMENT WITH LESS COST AND BOTHER TO YOU!

Here is *one* food that provides you with a sensible, *economical* feeding method. Friskies Cubes contain every food element dogs are known to need!

19 INGREDIENTS

Rich in meat protein, Friskies Cubes are made up of 19 separate high-quality ingredients. None of the vitamins and minerals are lost through baking, since Friskies Cubes are compressed meal. These crunchy, bite-size morsels exercise teeth and gums, too.

NO WORK NECESSARY

Simply feed Friskies Cubes as is. There's nothing to add, not even water. No messy, hard-to-clean bowls.

SAVE YOU MONEY

Friskies Cubes cost less than half as much to feed as *most* canned dog food! Two lbs. of Friskies contain as much moisture-free food as 6 one-pound cans of most canned dog food. And there's no waste—simply save unused portion for next feeding.

FLAVOR DOGS LOVE

Continuous taste-testing among dogs of all types and sizes has resulted in Friskies' tempting texture and delicious, "meaty" taste that dogs love.

Albers Milling Co.
DIV. OF CARNATION COMPANY
Los Angeles 36, Calif.

Friskies

OVER 50 YEARS' EXPERIENCE IN ANIMAL NUTRITION

CANNED FRISKIES, TOO, FOR VARIETY!

It's the "table-quality" dog food with *plenty of rich red meat* — not just ordinary meat, but U. S. Govt. inspected horse meat! This famous formula also has all the ingredients known to be needed for complete nourishment.

All around

Here are tips to help you save some time, steps, space, work

● Short cut: When you're using a recipe that calls for melted shortening, put the shortening in the pan you'll be using for baking, slip it in the oven while it's preheating. You get the melted fat and a greased pan all in one operation!—*Mrs. G. McDonald, South Carolina.*

● **Stooping to work in the garden is not a popular idea with me. I bought a small hand trowel, removed the short handle, and inserted a sawed-off broom handle in its place. Now I can use this for working around small plants in my flower beds—and do it standing up.—*Mrs. J. Davis, Georgia.***

● We hate to throw away our children's equipment, though we no longer need it. We've put one of these old items to work: The old folding gate has been fastened vertically to the side of the porch, and is now beginning a new life as a trellis for my beautiful climbing rosebush.—*Mrs. L. Elrod, Kansas.*

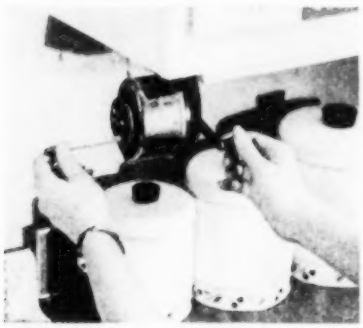
● **Our family shoeshine brush has many clean, removable covers to prevent one color of polish from smearing shoes of another color. The covers are old worn-out socks! Heavy ones work best—especially the wool ones.—*Mrs. E. Hertlein, Kansas.***

● Ever drop your window-polishing rag when you're 'way at the top of the step-ladder? Here's how to prevent that: Just make two short slits in the center of the rag about ½ inch apart. Then slip your middle finger through this slit while you are using the rag. It may save you many steps.—*Mrs. G. Ballinger, Illinois.*

● **If you have washable draperies, try this. Wash draperies as usual, but remove them from the line or dryer while still quite damp. Go over them with a hot iron, but don't iron them completely dry. Hung immediately, they'll fall in soft folds with no stubbornness.—*Mrs. W. Jett, Indiana.***

the house®

● We finally found a handy place to put a pencil sharpener—beneath one of the wall cabinets in the kitchen. If we ever take it down, the holes won't be seen.—*Mrs. J. Stubbe, Wyoming.*



● If you're short on storage bags for putting away winter clothes, package some of them in aluminum foil. Put the folded garment on a piece of foil, then bring the edges together and fold over and over. Make pointed flaps at the ends, then fold them over the same way. If garments are freshly washed or cleaned, then packaged this way, they will be safe from moth damage.—*Mrs. V. Rolf, Minnesota.*

● Children can love the simplest things! Mine can become thoroughly absorbed in a bright sock stuffed with cellophane, and tied together at the top. The crackling noise and the "funny feel" of it fascinates them.—*Mrs. L. Hall, New York.*

Photographs: Fletcher

● Carrying decorated iced cakes to the family reunion used to worry me. So now I put three jar rubbers on the bottom of my cake carrier to keep the cake plate from slipping around.—*Mrs. D. Maakestad, Iowa.*

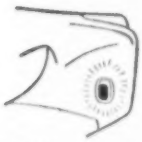
● Baby dresses are no trick at all to iron if you put them on a board their own size. I invested in an inexpensive sleeve board to use for this purpose—as well as for pressing suit sleeves without creases. It's invaluable.—*Mrs. D. Free, Indiana.*

Successful Farming will pay $5 for each helpful suggestion published. We cannot return unused suggestions.—Editors

New GE Automatic Visualizer Iron

Cuts ironing time 4 ways!

YOU SAVE TIME with the Visualizer Fabric-dial. *Dial* the right heat for every fabric in a jiffy—no more scorching, no more guesswork. Has a special setting for popular new synthetics.



YOU SAVE TIME with the automatic signal light that switches off the instant your iron is at proper ironing temperature. Heats up in less than a minute, too—and stays at constant heat.

YOU SAVE TIME because it has an extra-large ironing surface—now more than 30 square inches. Broader strokes mean *fewer* strokes—you're through sooner. Even heat presses perfectly.

YOU SAVE TIME because it's a *lightweight* iron. Weighs only 2½ pounds. Steady heat, not weight, does your ironing job. (Note extra-large button-nooks for ironing right around buttons.)

The ideal gift—for you and your friends! The G-E Visualizer Iron gives you many time- and work-saving features you can't find in any other iron. It's a wonderful gift—both to give and to get. See it at your G-E dealer's *today*.

General Electric Company, Small Appliance Division, Bridgeport 2, Connecticut.

STILL ONLY $12.95

Manufacturer's recommended retail or Fair Trade price.

GENERAL ELECTRIC

Bringing Up Baby

HINTS COLLECTED BY

Mrs Dan Gerber

(MOTHER OF 5)

Mrs. Dan Gerber

A clever dad I know showed his building imagination this way. After the baby began to toddle, he built a miniature corral at the back of the house . . . using the wall of the house for one side. Gave the little tyke plenty of room to roam, yet mother could keep an eye on the traveller by peeking out of the kitchen window. How about that for a practical brainstorm?

Four to make mealtimes more interesting for baby! Gerber's Baby Cereals . . . Rice, Barley, Oatmeal and Cereal Foods (a mixed cereal). These famous cereals are specially prepared for babies. All are pre-cooked and ready to serve. Simply add milk, formula or other liquids to get the smooth, good-feeling texture little ones prefer. Each has a bland, but distinctive flavor partial to delicate palates. And each one is enriched with iron, calcium and the important B-Vitamins growing bodies need. For the variety baby wants and needs in his diet rotate all four Gerber's Cereals. Top with Gerber's Strained Fruit for a treat.

Corduroy cue. After washing baby's corduroy overalls, try brushing the nap before overalls are completely dry. Keeps fabric new-looking, saves ironing.

Meaty subject. Growing babies, like adults, need plenty of strength-giving protein. Gerber's Strained Meats are ideal since they give baby the benefit of complete proteins. Made of selected Armour cuts, they're solid meat with just enough broth added to give the smooth texture that feels good on tender tongues. Low in fat and fiber content, Gerber's Meats are easy as milk to digest.

Free Booklet: "Foods for Baby and Mealtime Psychology." For individual use or group study. Write to: Mrs. Dan Gerber, Dept. SF4-4, Fremont, Mich. In Canada, c/o Gerber-Ogilvie Baby Foods Ltd., Niagara Falls, Canada.

Photograph: Arnold

A toy box is a must in every home whether or not owners have children of their own

How to plan . . .

When youngsters come to visit

If children have something to do and a place to do it, they're easily entertained in your home for a day, weekend, or family vacation. These suggestions can help you extend warm hospitality to the younger set.

Equipped with a toy box, you're ready for even unexpected little visitors. It's fun and very little expense to purchase one toy on each trip to town. Satisfy a variety of ages and temperaments. Choose dolls, toy cars, wooden beads for tiny tots who can't be expected to share toys. Children of ages 5 to 10 enjoy group games like ringtoss and checkers; for individual amusement, books and building sets.

When children are invited for the day, set aside a bedroom or den as the playroom. Clear all valuables and breakables from this one room, and make the toy box a central attraction. Shortly after arrival, acquaint children with the playroom. They'll play contentedly for hours while adults enjoy the quiet of the living room.

Little guests staying overnight often don't like going to bed. Here's an idea for the hostess. Suggest the visiting parents bring along a teen-age sitter familiar to the children. If this isn't possible, get parents' consent to engage a local sitter to stay in the household. Let children and sitter sleep in same room so the teen-ager can be a bedtime companion as well as an early-morning playmate.

Small-fry weekend or vacation guests deserve as detailed activity calendar as their parents. Again, arrange an indoor play area. Plan adult entertainment away from radio or television during favorite children's programs. A few minutes outside adds quiet to indoor hours. Take children along to help with some of the easier outdoor chores. Investigate community programs which might interest your small guests, and arrange to have them included. Even a neighbor who has children might be willing to entertain the young guests for a tea party one afternoon. Also find a few activities both your young and adult guests will enjoy sharing.

Any time young visitors are in your home, remember, children's daily routines need to be carefully kept even during a visit. Leave parents free at logical intervals to assist the small ones with baths, dressing, bedtime. Young appetites are prompt. If special late dinners are on the adult calendar, separate meals should be served early for youngsters.

Detergents and new washday brands
Have flocked upon the scene,
But clever housewives stay with Tide
To get clothes really clean!

Sooner or later almost everyone* turns to *Tide*

— FOR CLEAN, CLEAN CLOTHES!

No washday soap-no other detergent known—

NOTHING ELSE WILL WASH AS CLEAN AS *TIDE* - yet is so mild!

NOTHING ELSE BEATS *Tide* FOR GETTING CLOTHES CLEAN!

Tests against every known kind of soap and detergent *prove* this over and over again! Until Tide was invented, it wasn't *possible* to get your family wash so clean. And today's Tide has even *more* cleaning power. *More* mildness, too. No wonder Tide outsells any other washing product by *millions* of boxes!

NOTHING ELSE BEATS *Tide* FOR GETTING CLOTHES WHITE!

Never before Tide, was it possible to get your wash so *white*. And today's Tide has an even *greater* whitening power that gets clothes even more *dazzling* white. It's truly amazing! Get Tide today—there's *nothing* like it! (Tide is made by an exclusive *patented* formula.)

RECOMMENDED BY THE MAKERS OF 25 AUTOMATIC WASHERS!

Good reason, too! In these automatics, nothing else will wash as clean as Tide, yet is so mild—no washday soap, no other detergent known . . . including low-sudsing products. Test after test proves it. No wonder, in *every* leading make of automatic washer, more women use Tide than *any* other product sold!

More women by far use TIDE than any other washing product in the world.

Guaranteed by Good Housekeeping

Quickest, Easiest Way to Fight CRD (Air Sac), Hexamitiasis

Chronic Respiratory (Air Sac) Disease, Blue Comb, Hexamitiasis, often follow times of stress such as vaccination, chilling, shipping or moving. These diseases can hit chicks, poults and young birds hard—may wipe out your future profit in meat or eggs.

But here's the quickest, easiest way to help fight disease. The minute symptoms of these diseases appear, get one of the new feeds containing the wonder-working antibiotic Terramycin at high levels. These Hi-Level Terramycin feeds contain 10 to 25 times the amount of Terramycin used in ordinary feeds for growth stimulation. There's no mixing. No birds to catch, no equipment to handle.

Ask your feed dealer for feed containing Hi-Level Terramycin. Keep Hi-Level feed on hand. Feed it the minute symptoms appear.

Use Hi-Level Terramycin Feeds For These Diseases:

POULTRY: Blue Comb (Mud Fever, Non-specific Enteritis) Chronic Respiratory Disease, Hexamitiasis.

SWINE: Infectious Diarrhea (Scours, Necro)

CALVES: Infectious Diarrhea (Scours)

Effective treatment of disease requires prompt and accurate diagnosis. Be sure to consult your veterinary or poultry pathologist.

Terramycin®

BRAND OF OXYTETRACYCLINE

. . . from the world's largest producer of antibiotics

Pfizer

Chas. Pfizer & Co., Inc., Brooklyn 6, New York

Headquarters for Antibiotics and Vitamins for Animal Health and Nutrition

TERRAMYCIN® • PENICILLIN • DIHYDROSTREPTOMYCIN • POLYMYXIN

What are the facts in the price-support fight?

Flexible...

What do foes call the plan?

Sliding-scale support.

What is the plan, really?

Under the flexible plan, price support comes down as the supply of the crop *goes up* — and the support goes up as the supply *decreases*.

What do farmers get out of it?

Support at 75 to 90 percent of parity for products covered, *depending on supplies*.

What do you have to do to get support?

Comply with your acreage allotments and marketing quotas when they are proclaimed.

What products are affected?

The main argument concerns the so-called "basic" farm products — corn, wheat, cotton, rice, tobacco, and peanuts.

How do you get support price?

Through the Commodity Credit Corporation nonrecourse loans and purchase agreements, which you can use if *market* price is below *support* price.

October 8, 1947, was an historic day. In a way, the whole controversy of flexible vs. rigid price supports started on that day.

The agricultural committees of the Senate and the House of Representatives were meeting in joint session. The secretary of agriculture and his staff were giving their recommendations on farm legislation to replace the wartime price supports which were to expire at the close of 1948.

Carl Farrington, chairman of the secretary's Price Policy and Production Adjustment Committee, was reporting:

"We also . . . need a strong program of production goals, aided by adjustable price supports, so that [*Turn to page 102*

Rigid...

High, rigid support.

Under the rigid support system, the support level is set at 90 percent of parity — and does not change as supply of the product changes.

Support at 90 percent of parity for products covered, *regardless of supplies*.

Comply with your acreage allotments and marketing quotas when they are proclaimed.

The main argument concerns the so-called "basic" farm products — corn, wheat, cotton, rice, tobacco, and peanuts.

Through the Commodity Credit Corporation nonrecourse loans and purchase agreements, which you can use if *market* price is below *support* price.

When Mr. Farrington finished making his recommendations to the Agricultural Committees on October 8, 1947, Congressman Pace of Georgia, then a leading member of the House Committee, was impatiently waiting to question him. He started out:

"Mr. Farrington, I must say first that I have never been more shocked or more disappointed in a recommendation coming from the Department of Agriculture . . .

"It begins and it ends with one single theme . . . that the farmers must, with no (price) assurance . . . produce all of the food the people of the nation want."

Among other things, Congressman Pace objected to the proposal [*Turn to page 104*

Which do you favor? Cast your vote, and we'll report the results

Check your choice ▶ Flexible | Rigid

Send to: Editorial Offices
Successful Farming
Des Moines 3, Iowa

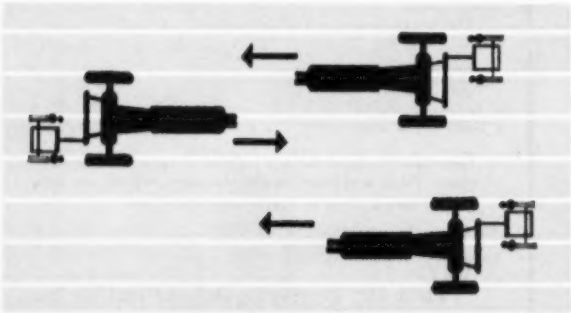
Reasons for choice

Farm size and major products sold

Get set now for

Tractor tracks are the seedbed. Here's a new plow-and-plant method which skips all harrowing. Developed in Michigan, it is catching on rapidly there. Above is Steve Dickerson, Van Buren County, Michigan, hybrid-seed raiser, who sold his 4-row equipment in 1953 to go to this system. Besides reducing time and expense of ground preparation, it takes fewer cultivations, improves tilth

Around-the-field planting reduces stops. Also, spraying, cultivating, and picking are speeded up. There are two ways to set it up. Here's one way (see diagram): Step 1 is a single trip around the field. Step 2 can be several short rows to round off



▲

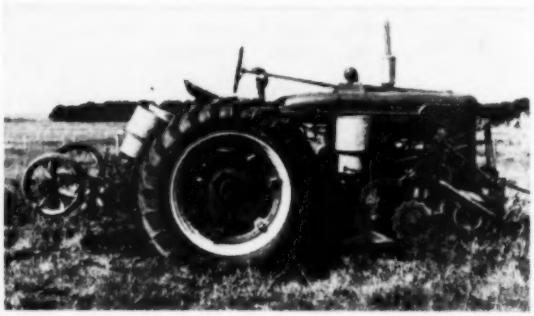
Here's how to try it on a few acres. In case you don't have a narrow tractor, set out the wheels of a larger tractor to exactly double the wheel width of any pull-type corn planter.

Hitch the planter to one side as shown in diagram above.

Other big advantage of wheel-track planting is easier weed control. This corn, being cultivated for the first time, was not rotary-hoed or otherwise touched after planting.

Clumps of volunteer corn are about the only "weeds."

▼

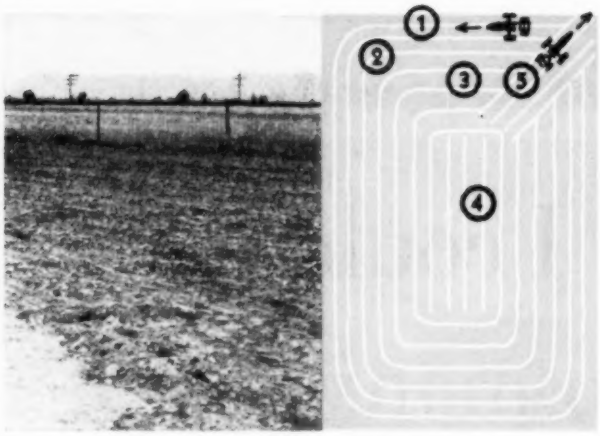


Planting without plowing is made possible with the mulch-type planter. Machine replaces *all* operations ahead of planting—also provides for heavy fertilizing. For more on results, see March *Successful Farming*, "8 ways to raise corn"

Photographs: Hufnagle, Frink, Monkmeyer, Allen

Faster, lower-cost planting

By George D. Johnson



each corner. Then continue going around until you near the center. Finish off center with back-and-forth rows and make 4 rows out to a corner. (See text for another method.) Extra fertilizer platform on the rear of above planter is good idea

This year, through acreage allotments, the government is the same as asking us, "Will you take 17.4 percent less income from corn?" Some sign up, some don't—but *no one wants to take a cut in income.*

One of the best ways to prevent this—without adding to the oversupply of corn—is to *cut the costs of raising corn.* Ten cents per bushel saved would mean a lot—figure it up on your last year's total yield.

Where do we start? We look for ways to reduce labor, fuel, and machinery used working the ground and planting—while still pulling every bushel we can from each acre. On these pages are methods farmers are using to cut these costs.

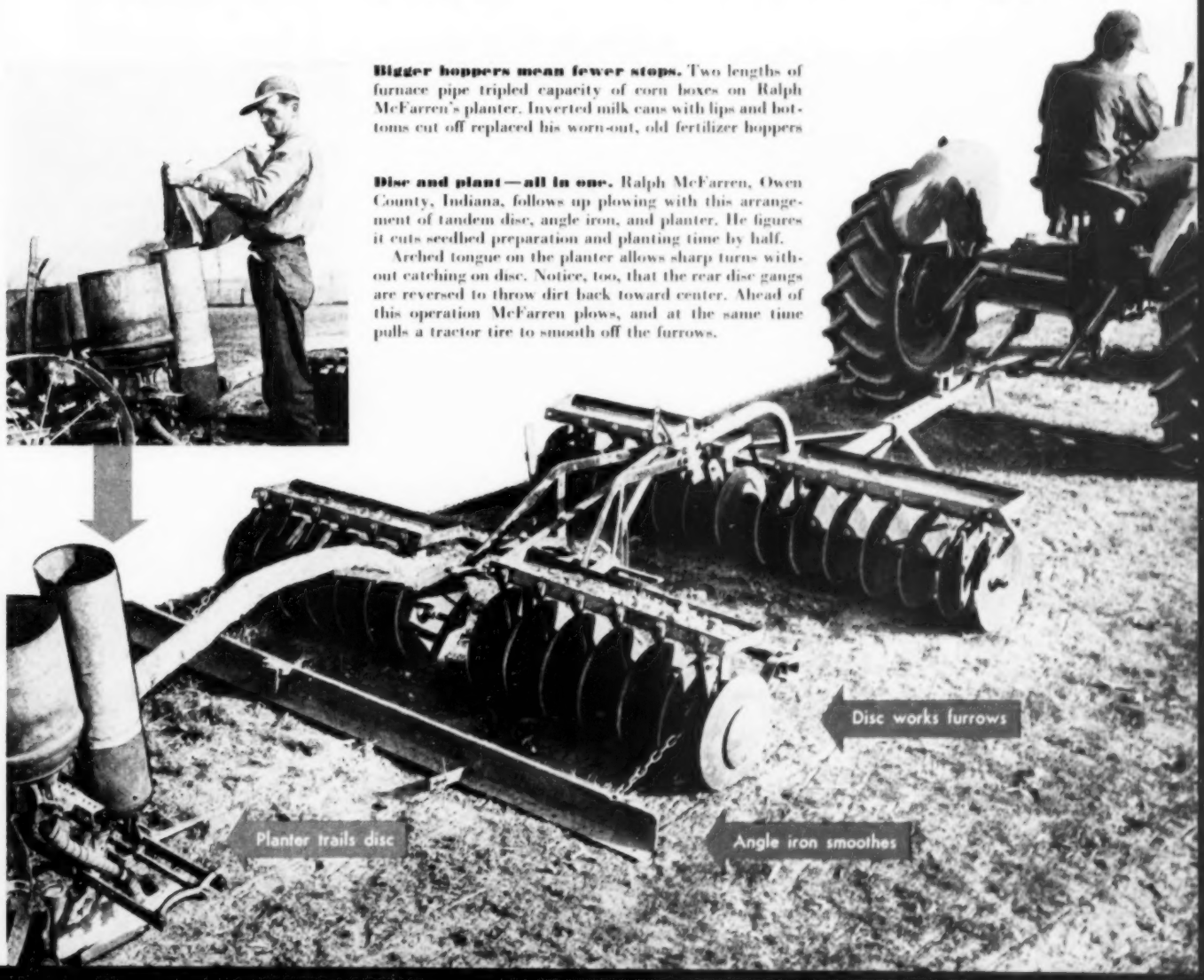
Here are a few more details on two of them:

Round-the-field planting is being used on regular-shaped fields. This system has worked especially well with wide-row corn, [*Turn to page 76*

Bigger hoppers mean fewer stops. Two lengths of furnace pipe tripled capacity of corn boxes on Ralph McFarren's planter. Inverted milk cans with lips and bottoms cut off replaced his worn-out, old fertilizer hoppers

Disc and plant—all in one. Ralph McFarren, Owen County, Indiana, follows up plowing with this arrangement of tandem disc, angle iron, and planter. He figures it cuts seedbed preparation and planting time by half.

Arched tongue on the planter allows sharp turns without catching on disc. Notice, too, that the rear disc gangs are reversed to throw dirt back toward center. Ahead of this operation McFarren plows, and at the same time pulls a tractor tire to smooth off the furrows.



"I never knew I could raise so many pigs!"

How farmer on cover does hog chores

Tractor does the work of moving Bill's portable houses to pasture. Two steel shafts mounted on the tractor manure loader make the job easy. The shafts are simply lowered, pushed under the house, then raised, and house is carried

Hydraulic drawbar comes in handy when sows and pigs must be moved to pasture. The crate for the sow is mounted on the drawbar and the pigs are carried in the box on top of the crate

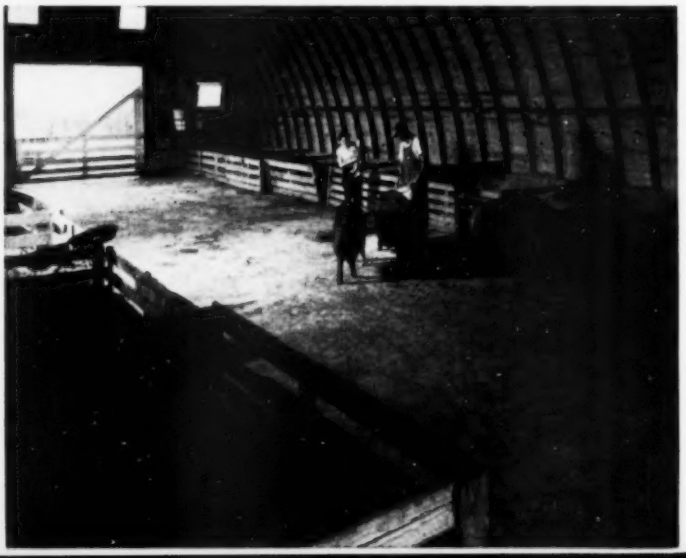
"The more pigs I raise, the cheaper they grow," says this young Indiana farmer. His system is simple, and will work for you

By Dick Hanson

Back in 1948, Bill Congleton, Frankfort, Indiana, raised 50 litters of pigs. It was a tough job. Bill couldn't get help, and he wasn't set up for that many pigs plus farming 316 acres.

Last year, Bill raised *170 litters*—about 1,300 pigs—farmed the same number of acres with one hired man, and decided hog raising was only as tough as you make it.

The jump from 50 litters to over 3 times that many didn't happen overnight, of course. After his tough time with 50 litters in 1948, Bill said he did some thinking. He figured that if he couldn't raise pigs easier, [*Turn to page 171*



Farrowing house is actually Bill's machine shed. Pens are set up in the shed at farrowing time and heat lamps are plugged into outlets along the wall

Ear corn fed on pasture is delivered with Bill's dump truck. Feed is never carried or shoveled on this farm after the pigs are 10 days old. Labor saved by dumping corn more than offsets the amount wasted by the pigs

Photographs: Suter, Hedrich-Blessing

Self-unloading wagon is used to fill the large pig supplement self-feeders when pigs are on pasture. Feeders are located next to the fences so few gates have to be opened

Automatic waterers are used in some pastures. Waterers are fastened to wooden platforms and connected to pipeline running from farm buildings. Big water wagon — see cover — is used to fill other tanks in pastures

Moving self-feeders is easy when they're mounted on wooden platforms. Tractor manure loader, used for moving portable houses, is also used here to save more time and labor

Grain-storage building has built-in sheller, feed grinder, and scale. All Bill's feed is stored here, and self-unloading wagon can be filled from several different overhead bins.

Bill said this building is the main reason why he can raise so many pigs without spending a great deal of time or labor.

How to Keep your farm outside the house

By Maurine Harris

Make *this* spring a time to get at the *source* of one big farm house-cleaning problem: Instead of cleaning dirt out, keep it from getting in!

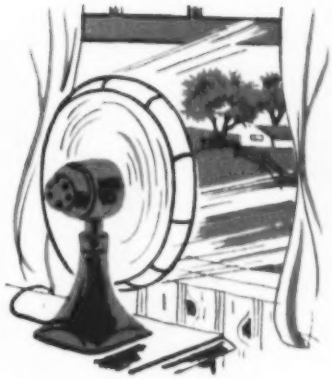
An extra sink and shower near back door for men's wash-up will save you endless job of cleaning up trail of mud through the house to bathroom

Set aside a pair of old shoes to do garden duty; slip them off when you come inside. No matter how well you scrape, garden shoes don't get clean!

Get a dog's dish that's large and heavy, so your dog won't spill food. Take the dish in after each meal, so it can't be a mecca for hungry flies

Don't let sweepings make a return visit. Use a dustpan, empty in paper sack to be burned. Use disposable bags in your vacuum cleaner—or empty dirt in paper

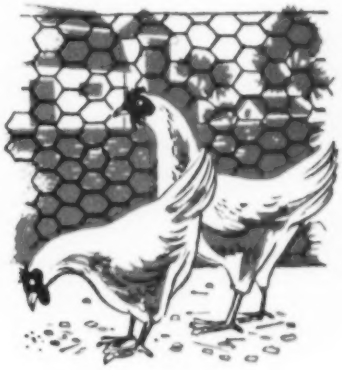
Locate your farm office near an outside entrance—or build a new entrance to the office—so traffic in and out won't leave tracks on the good carpet and clean floor



Place your electric fan so it blows hot air *out* of the room, instead of pulling outdoor air *in*. This gives you cooling without blowing in the excess dirt and dust

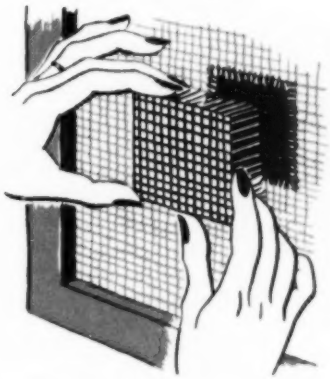
Build vegetable-washing rack—it's an easy way to keep the garden from coming in with the carrots! Tack screening on the bottom of a frame—mount it on legs

Calk loose window- and doorframes, and apply new putty around loose windowpanes; install weatherstripping on drafty openings—shut out *dust* as well as cold



Put those chickens in a pen—or fence yourself away from them! Little feet, yes—but up to no good. Those tracks and loose dirt add to the house cleaning

Do away with the old, open bucket on back porch—it's sure to lead you to defeat in your battle with flies. Get a new-type sanitary garbage pail with a lid



Patch every hole in screens and doors—those pests might get the hint they're not wanted. Besides the *visible* mess they make, the germs flies can carry are intolerable

Transform your trash pile! Instead of a heap in the back yard that lets fine ashes soar into house on a breeze, get a modern gas or electric incinerator—*clean!*

Drawings: Lewicki

"While other dairymen add more cows to get more milk, I'll milk fewer and . . .

Make one cow do the work of two"

By William Ward

Today, there are two plans dairymen can follow to increase their income. A dairyman can either add cows to his herd, or try to get higher, more economical production from the cows he already has.

Archie Meek, Norwich, New York, believes he can make more money with *fewer* cows than he might possibly handle. And he's got the records to prove it. As an example, Archie and a part-time hired man handled more than 400,000 pounds of milk this past year from a herd that averaged 25 purebred milkers.

All the cows in this herd are high producers. They averaged 16,585 pounds of milk and 612 pounds of fat last year on twice-a-day milking.

But let's start at the beginning to get the "reasons why," and perhaps pick up a few borrowable ideas. When Archie Meek decided to leave his father's farm and "go on his own," he bought a 115-acre farm near Norwich, New York, with some good river-bottom land, along with the typical hill land in that part of the state.

Next, he went looking for "*good* Holsteins with good family blood lines." By choosing his herd carefully, he came up with several daughters and granddaughters of two sires that later turned out to be among the best in the country.

Even with good cows to start with, Archie knew that they would have to be combination vacuum cleaners and race horses just to live on poor pasture—they couldn't produce a lot of milk, too. So he began to improve 25 acres of pasture—all that was improvable. Twenty-five additional acres of old permanent pasture could not be plowed.

The land was fitted, limed, fertilized, and Ladino clover and orchard grass seeded. A mixture of 2 pounds of Ladino and 5 of orchard grass per acre was used. Archie says it's higher yielding during the whole season than other long-lived pasture mixtures. On fields farther away from the barn, he used a combination of Ladino and bromegrass, which can be controlled easier than orchard grass.

A mixture of 5 pounds of Empire birdsfoot and 5 pounds of timothy per acre was seeded on hill land difficult to plow. It has been the best long-lived, high-producing legume for this type of land on the farm. Each acre of pasture is top-dressed with 200 to 400 pounds of 0-20-20, and Archie says he's really impressed with results.

In addition to the Ladino and birdsfoot pasture, the cows get out early in April for an hour or two a day on rye pasture. Sudan grass from late July until frost, plus some fall rye, holds up milk production at the "toughest" pasture time of [*Turn to page 167*

Here are the points followed by Archie Meek in selecting the cows to add to his herd

The cow must be able to produce 600 pounds of fat a year on twice-a-day milking.

Production records must show the past performance of the cow.

The cow must be big, but still have good dairy conformation.

Udders must be large, well attached, to stand up under heavy production.

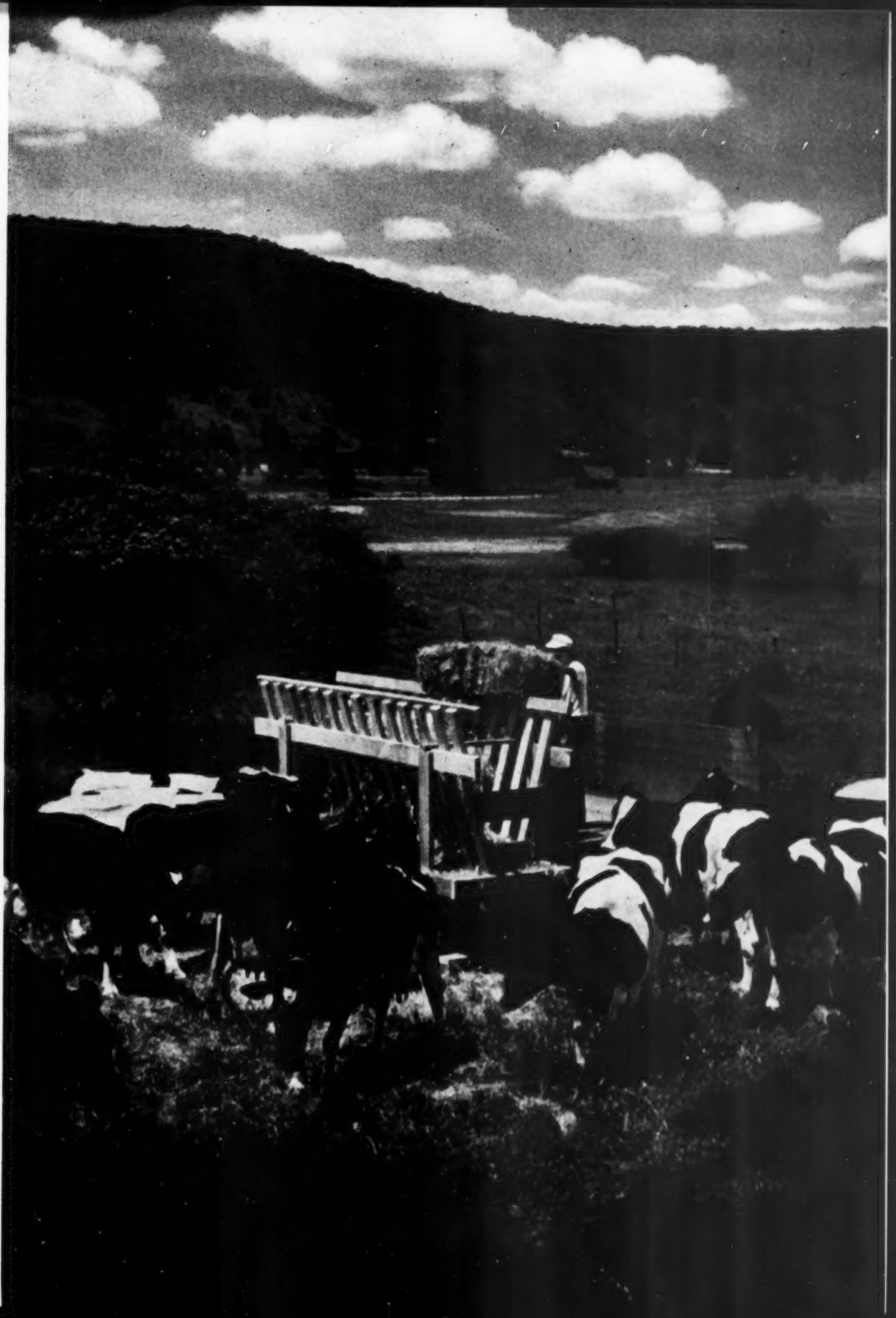
The cow must have a good deal of depth in the heart girth, as "pinched" cow can't stand year-after-year production.

Good blood lines are important, but not absolutely essential.

The cow should be a "roughage" cow, not a "grain" cow.

Special hayracks are set up in Archie Meek's pastures during the summer. The cows always have plenty of roughage which is mainly responsible for the herd's high, but economical production

Photographs: Royle



Photographs: Reynolds, Photography, Inc.; Suter, Hedrich Blessing; Bill Hedrich

Windows can be well dressed without curtains. When the Rainey McCoys remodeled the den in their farm home near Lafayette, Indiana, they used shutters instead of curtains in the picture window.

Painted to match the ceiling, shutters make an interesting treatment — and don't shut out the outdoor view. Pleated valance to match sofa gives a finishing touch.

◀ **For a unified background,** or with great expanses of window, try draperies to match the wall color.

Mrs. F. N. Flanders, Keota, Iowa, decided she'd tire quickly of patterned draperies across so much window in her new farm home, so here is her solution. The gold braid trim on the cornice keeps it from being too plain and matches the sofa in room.

▶

Make plants a part of your window treatment! Mrs. Glen Fultz shows off her prize collection of African-violets and plays up her ceiling-to-floor windows in the dining room by using white iron plant stand.

Large windows take advantage of beautiful view outdoors. Window sills are used to show off collection of antique bottles Mrs. Fultz treasures.

Wonderful ways with windows

By Betty Fisk

What is prettier than spring on the farm? Frame the beauty of the outdoors with attractive windows inside! Here's a roundup of winning windows from farm homes 'round the country. Try some of these ideas in your own home and make yours wonderful, too

More ideas on page 118

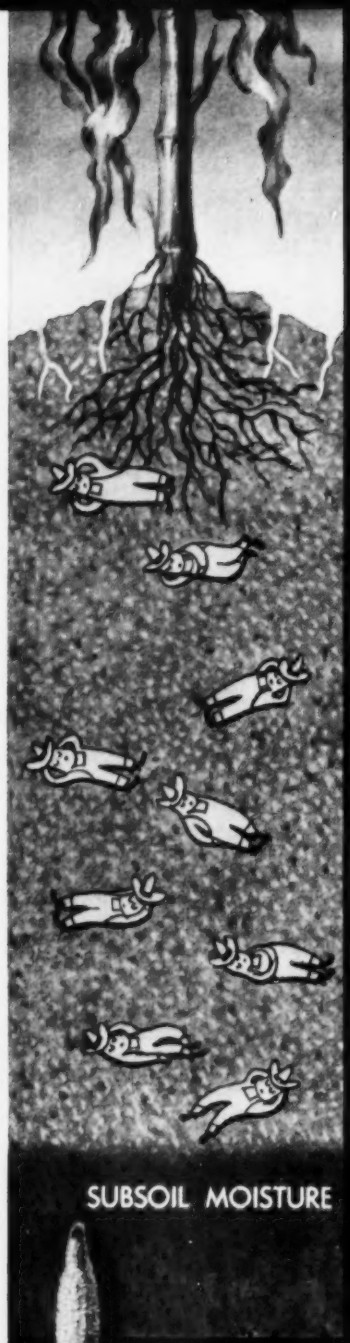
Be sure you have a picture in a picture window! The Herbert Wehers of Wayne, Nebraska, put theirs in the dinette so it frames the countryside. So they don't lose an inch of view when draperies are open, extension rods on either side let draperies hang over wall and just to edge of window

When two rooms open together, use the same drapery fabric to tie the rooms together. Mrs. Flanders used a pleated valance over the sink in kitchen, and the same fabric for dinette curtains. Note the knife-pleated curtains instead of pinch-pleated! Draperies combine the other colors in rooms

Glass curtains add softness to windows. In this attractive bedroom, sheer glass curtains are combined with ruffled chintz on double windows. They give privacy but don't cut out the light. Mrs. J. H. Volden finds them very successful and pretty in her remodeled farm home near Paxton, Illinois

Ample moisture — ample fertility

Moisture lets microbes (yellow gremlins) release fertility from organic matter. Fertilizer (green gremlins) also feeds the plant



Drouth — no fertilizer

Lack of moisture drugs microbes — no plant food is then released. Roots starve, thus remain shallow

Drouth — but with fertilizer

Microbes remain sound asleep, but nitrogen and phosphorus from fertilizer feed plant. Strong roots are thus able to tap subsoil

Unfertilized corn burned up

Despite drouth, high fertility made this crop

Use fertility to beat a drouth

By G. E. Smith
University of Missouri

Here is the most exciting fact to come out of last summer's big drouth—fertilizers actually saved the corn crop for many farmers

Here's how it works

Unfertilized corn burned up last summer while that on well-fertilized land grew steadily all through the season.

We took the twin photographs at the lower left corner of the opposite page on same day, across road from one another in Indiana. Fertilizer alone made the difference. Corn at left made 80 bushels, at right, 50.

Despite drouth, high fertility made the crop in the center photograph. Corn at left of man had heavy fertilizer, including 200 pounds of nitrogen. Yield was 70 bushels.

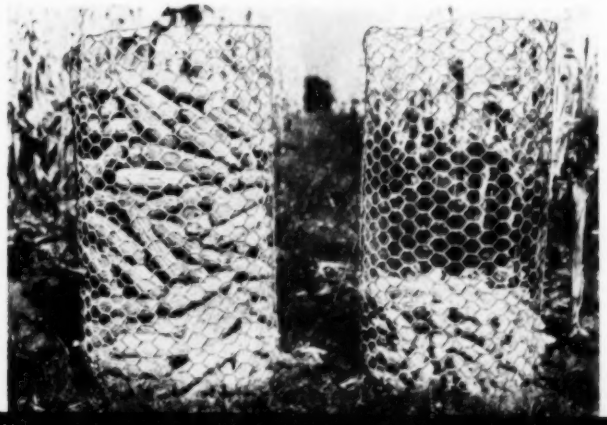
At right, where no nitrogen was applied, it was but 19 bushels. Corn at left made a bushel of grain on 5,600 gallons of water—corn at right took 21,000 gallons.

High fertility boosts shelling percentages in corn from field described above. Corn from 70-bushel plot shelled out 80 percent—on 19-bushel plot shelling percentage was 75 percent.

If corn were selling at $1.40, the higher-yielding corn would have been worth $8.75 more per 100 bushels of 70-pound ear corn. This is hidden effect of a dry season.

Photographs: Smith; Geiser. Drawings: Lewicki

High fertility boosts shelling percentage



Mark down 1953 as the year which disproved the idea that heavily fertilized corn fails in a drouth.

What actually happened was this: Release of natural plant food from the soil was seriously reduced in the parched topsoil—but fertilizer came through to make the crop.

A big percentage of the livestock in last year's countrywide drouth area is literally eating on fertilizer right now. Many farmers in the same areas who did not apply enough fertilizer are short of feed.

Cornfields in central Missouri—where only 5 inches of rain fell from planting to harvesting—yielded 65 to 80 bushels under full fertilizer treatment. Where nitrogen was deficient, yields ran only 15 to 25 bushels.

Ray Nicholson, Iowa research agronomist, reports an application of 120 pounds of nitrogen gave a return of nearly $50 per acre over fertilizer cost on the Southern Iowa Experiment Farm.

The University of Illinois reports corn yields of 75 bushels per acre with good soil treatment, but only 20 bushels on unfertilized neighboring plots.

Why did this happen?

All these researchers report that *corn on unfertilized soil failed to develop a deep-root system.* On these fields it was possible to make "mud balls" at a depth of 24 to 30 inches in August, yet the plants were wilting, their roots being within inches of this moisture supply. Where fertility was provided, the corn plants tapped the moisture to a depth of 4 to 5 feet.

The results from Illinois showed that corn on well-treated soil produced 4,600 pounds of roots and that 13 percent were below 11 inches. However, on the untreated soil, the roots weighed only 1,600 pounds and 91 percent were in the surface 9 inches.

By going deeper, the fertilized corn used the available water more efficiently. The Missouri experiments showed that the heavily fertilized corn, producing 78 bushels per acre, used a total of 16 inches of water. *This was only 5,600 gallons for each bushel produced.* Where there was no treatment, the 18-bushel crop removed 14 inches of water, *or 21,000 gallons per bushel.*

The drouth cut total corn yields, of course, in 1953. But the increase in yield due directly to fertilizer nutrients, particularly nitrogen, was greater than in seasons with ample rainfall. The explanation is this: [*Turn to page 84*

Homemade egg washer is built from old washing machine and air compressor, which forces bubbles around eggs. A detergent water is used. Eggs are rinsed in warm water, air-dried before grading

He handles 5,000 layers alone

By Howard C. Bateman

Push-button egg production is more than just a dream for David Nettleton, Jr., Locke, New York. He comes about as close as possible to making it a real thing.

Nettleton makes use of nearly every mechanical laborsaving device in the book. Using them, he is able to handle 5,000 layers alone. The only hired labor needed is when the laying pens are cleaned annually to make room for the new pullet crop.

Nettleton hasn't gone into an expensive building program to house his laying flock. Rather, he [*Turn to page 136*

Eggs are lowered to the ground level, using a rope-and-pulley arrangement—saving many steps.

Setup also can be used to raise or lower watering, feeding, and other equipment used on upper floors.

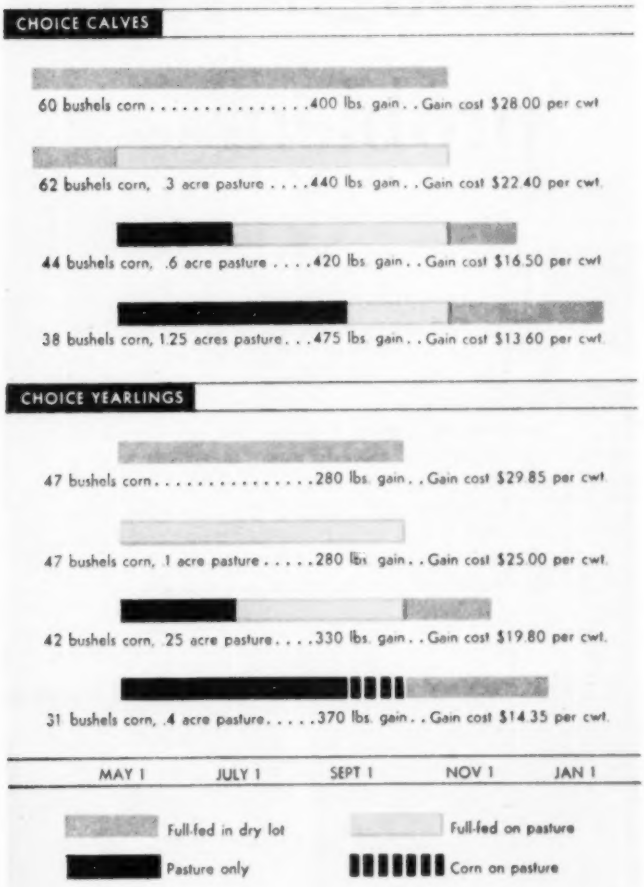
Tractor-mounted scoop is used to clean lower floor. Litter on upper floors is pushed through hole in floor with small garden tractor—drops in spreader below

Automatic feeding system is biggest laborsaver. Mash and grain are dumped into elevator which lifts it to overhead bins. From here, feed is routed to automatic feeder on each floor.

Other chutes lead from grain bin to each laying pen. Grain is drawn out by merely pulling slide in chute.

Photographs: Merrim, Monkmeyer

Methods and costs for feeding cattle this summer



The two charts above outline different methods of handling Choice calves and yearlings from now until market time. If more than one of these methods fits your farm, then choose the method that will give you the cheapest gains

How to get

Dry-lot prices for grass-feds

By R. M. McWilliams
Iowa State College

How can you make the best use of your pasture for beef cattle?

This article is a roundup of information which should help you answer that question. Results reported here are from 5 years of feeding experiments with Choice yearling steers on pasture, and a 3-year study with Choice calves. The experiments were run by the Iowa State College Experiment Station.

First, this is how the different test groups of yearlings were handled. After the cattle had been wintered to gain about 1 pound per day, they were turned out to pasture as soon as the grass would permit—usually about the first week in May. All cattle were finished to about average Choice grade regardless of time required.

One group of yearlings was grazed without grain for 60 days, then [*Turn to page 158*

Here are results of 5 years of tests on how to combine grain and grass for most profit

1. Any holes, cracks, or bad spots in the plaster should be filled with patching plaster. Rough spots and bumps should be leveled off

2. Apply size to the wall with brush. This is to give the burlap a better hold on the wall or what the authorities refer to as "tooth"

3. To give the burlap a firm side to work with and to keep the threads from raveling later, stick masking tape all along the selvage

4. For an even edge to match seams, cut off the selvages (about half tape width) with razor guided by straightedge

Photographs: Hopkins

His wife says their new walls are just right to set off their accessories and maple furniture. If they ever get tired of the natural burlap color, then the wall can always be painted

They solved their

Rough-wall problem

By Claire Miller

The George Johnsons (he is a *Successful Farming* editor) had living-room side walls and ceiling which were too bumpy to take wallpaper and too cracked to paint. The Johnsons were stumped till they devised a way of covering the faults with pennysaving burlap. I knew their problem walls were typical of those in many farm homes, so I thought I'd pass the good word along.

The burlap really made a transformation from the original bad walls to an interesting and durable wall covering. Its texture makes bumps unnoticeable and goes right across the cracks.

5. Apply wallpaper paste rather heavily to the wall just the width of one strip at a time. Pasting the burlap won't work satisfactorily

6. Starting from top, hang the burlap with taped edge on inside. Mistakes are easy to remove as long as the paste is still wet

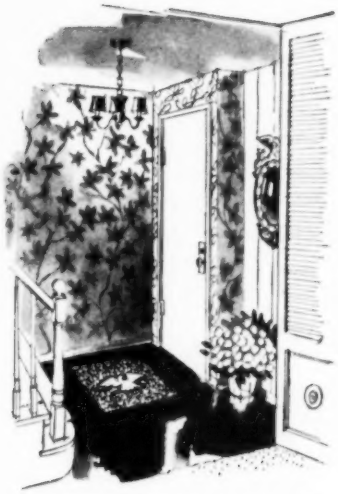
7. Since burlap is flexible and the taped edge is firm and even, it's quite easy to get perfect butted seams after they have been rolled

8. The rough edges on the top and bottom can be trimmed with a razor or hidden with ceiling or floor molding. **END**

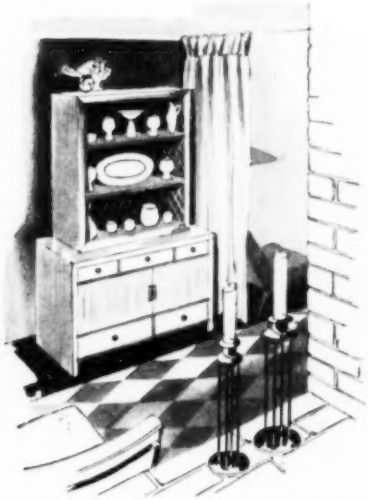
Wallpaper bonuses

For a really decorative and inexpensive item, wallpaper is too often overlooked. Here are some different bonus ideas—just for a starter

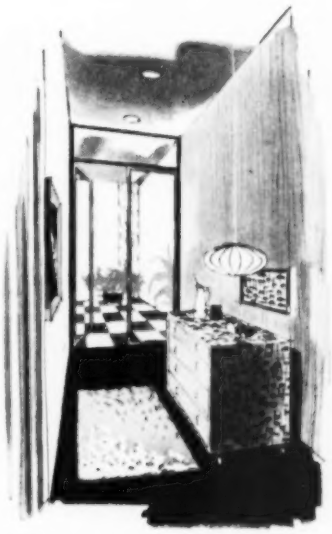
By Pat McBrien



Many entryways are too small or narrow for furniture. This is the spot for a bold pattern to add interest and take the place of furniture

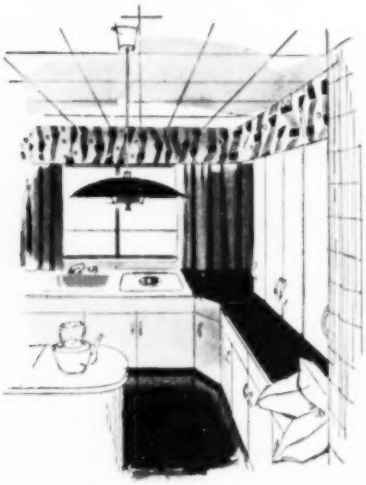


If the shelves of your hutch cabinet or bookcase look bare, paper the backs. It will make items like white milk glass show up to an advantage



Old furniture can be restyled, or unpainted furniture made individual by covering it with wallpaper. A coat of shellac will protect surface

Cover your wastebasket next time you paper. It will blend right in with the scheme of things. Try it also on your sewing or jewelry box

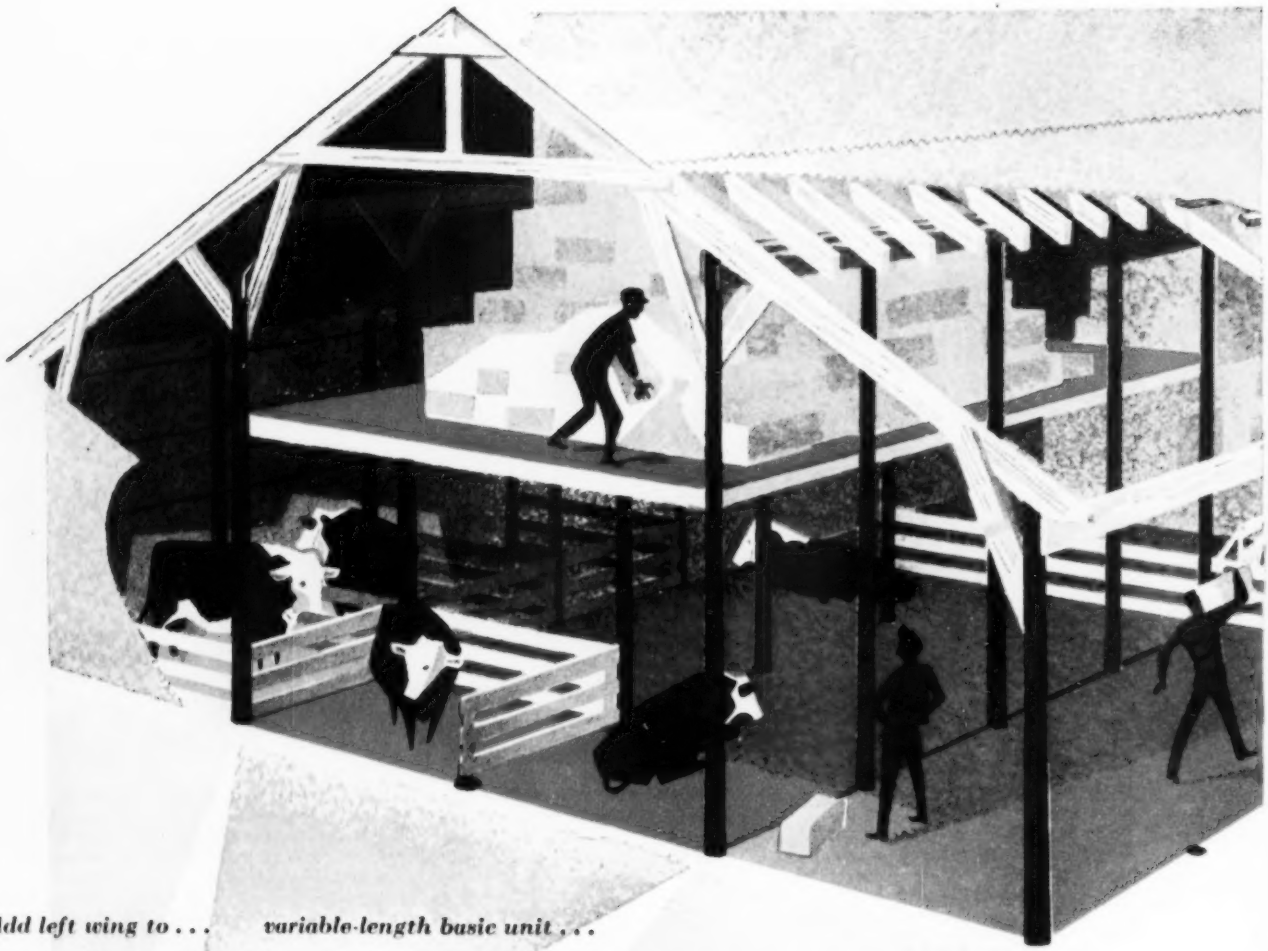


The area between a kitchen cabinet and the ceiling can add a lot of interest to the room if it's covered with a paper of bold, gay pattern

If you paper one wall with a large pattern, save the leftovers and frame the pattern to hang on the unpapered wall for real eyecatcher

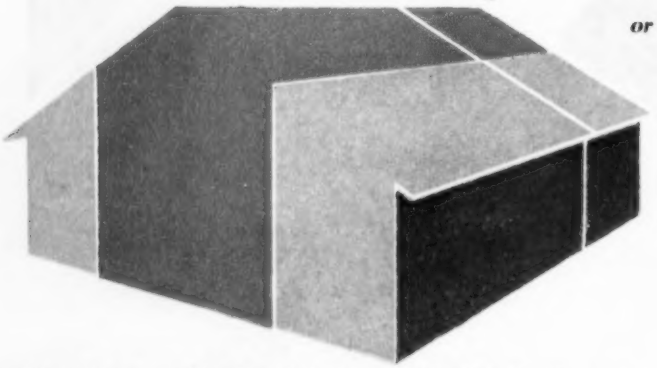
A chest or bed becomes dramatic when the area directly above and behind it is papered. You can pay more for paper used in small amounts

A new Successful Farming plan for **A thrifty,**

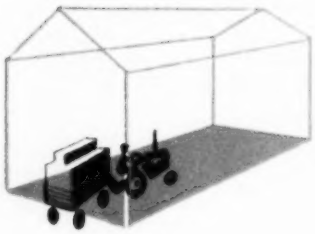


Add left wing to . . . *variable-length basic unit . . .*

or a right wing



Here's a *really flexible* barn! Build it now as long as you need, add to it later, or convert it to other uses as your farming needs change



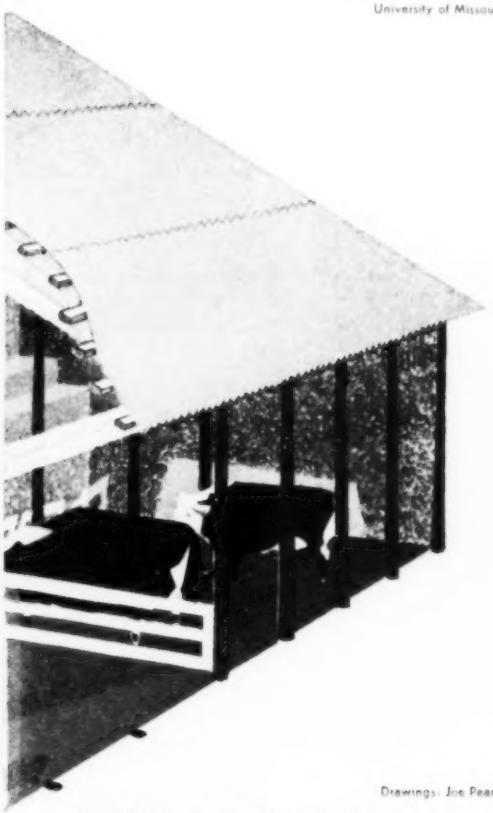
Hay-storage shed. The basic unit alone serves this purpose. Truss permits unobstructed space in center of the area.

Distance between poles is 12', ample for using feeding fences along edges for self-feeding cattle. Capacity is varied by changing the length of building.

flexible barn

By S. S. DeForest

Barn design by Merle L. Esmay
University of Missouri



Drawings: Joe Pearson

Beef barn. Basic unit, flanked by wings on each side, makes up barn. Length is variable in increments of 12′, the distance between poles. A simple truss eliminates center row of poles to support the roof. Loft makes use of overhead space for bedding storage

Building economy *and* flexibility into a new barn is a challenge to your ingenuity. Too often this combination just doesn't fit. Yet, Agricultural Engineer Merle L. Esmay was "up to the problem" when *Successful Farming* asked him to design such a barn.

Our requirements for a *flexible* barn were rigid. We wanted to give you a plan that was *multiple use* as well as *alternate use*. It was to have characteristics for being pole-built, with or without a foundation, and designed so the enclosed area was easily adjusted to fit farming operations now *and* later. We also thought you would like construction features such as the loft for bedding and the simple truss for reducing the number of poles.

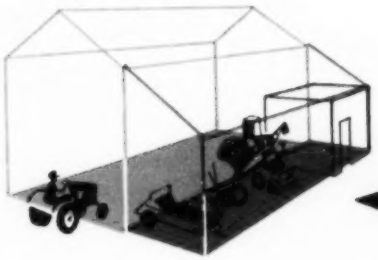
As for cost, the chart on page 163 shows how it ranges in sample areas. If you supply your own labor or materials, total cost will be even lower.

Shown here are only five of the alternatives that are possible with this set of plans. They illustrate how you can increase the width of a *basic unit*, 24′ wide, by adding 12′ wings to either side or both. To determine the length of your new building, decide how many 12′ increments or "bents" you need. Poles are 12′ apart. On paper, you can adjust the width and length back and forth until you end up with a barn that satisfies you as to appearance and size. Then decide whether you want a foundation or "pole" construction, whether you need or want the loft, and you're "ready for business." The plans, ordered from *Successful Farming* (see box below), show the construction details.

After the barn is built you won't be later handicapped by a hard-to-use, monumental structure if you'd like to change type, size, or quantity of enterprise. Adding more bents or wings enables you to increase your activities, while [*Turn to page 163*

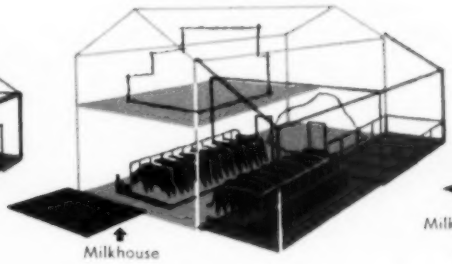
Here's how to order complete detail plans

Working drawings for each of the uses illustrated above, complete with list of materials for a 12′-long bent, are available by writing to Department 4204, *Successful Farming*, Meredith Publishing Company, Des Moines 3, Iowa. Order Plan No. 54804 and enclose small purchase price of $1



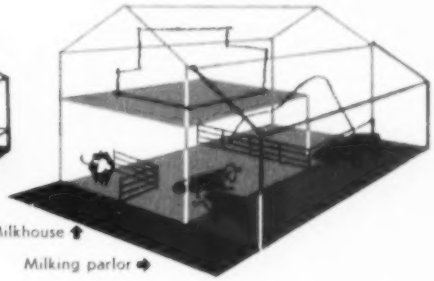
Machine shed and workshop. Basic unit, plus one wing, gives you a 36′-wide building. No center posts are necessary.

The length can suit your use, or the wing can be left off if desired and the basic unit used alone. Workshop with large doors can be placed in any corner of barn.



Stanchion barn. A 48′-long section with loft above for bedding storage comprises the stall or stable area.

Hay-to-ground storage area, separated from stable, can be opened on one side for self-feeding. Location of the calf and maternity pens can be varied.



Loose-housing barn. Basic unit and one wing is open to the weather along entire south side. The feeding area is entirely separate from the resting area.

Resting area is same size as stanchion area in plan at left, so you can switch to stanchion-type barn later if desired.

For Easter

—*a dinner to remember*

By Elizabeth Page

Add a touch of spring to your Easter dinner with a table planned for beauty and a meal that's "company" special. All for the family, of course. Here's a chance to get out your best china and glassware, polish the silver, and splurge on flowers. Then add a fancy garnish or two to the food and you'll have a meal to be proud of.

But don't make this special family dinner a "once every six months" occasion. Do it often. It's good practice for the family to shine up their company manners at home, and it's a gracious way for you to say, "My family comes first."

But even a fancy meal shouldn't chain you to the kitchen. Plan ahead so you can get to church in plenty of time without a worry in the world about dinner. Here's how: Have the rolls ready to rise for the first time and the ham in the oven when you leave for church. That gives you about two hours before you need to set foot in the kitchen again. When you're home from church, shape the rolls, fix the salad, glaze the ham, and set the table. The cake's no worry, if you bake and frost it the day before. Garland it with flowers for an easy, attention-getting centerpiece.

Then when dinner's ready, allow plenty of time to enjoy it.

Coconut Angel Cake

- 1 cup sifted cake flour
- ¾ cup sugar
- 1½ cup egg whites
- ¾ teaspoon salt
- 1½ teaspoons cream of tartar
- ¾ cup sugar
- 1 teaspoon vanilla
- Pink-tinted coconut
- Jordan almonds

Sift flour with ¾ cup sugar 4 times. Beat egg whites with salt until frothy; add cream of tartar and beat until stiff but not dry. Add remaining ¾ cup sugar, 2 tablespoons at a time, beating in after each addition. Add vanilla with last addition of sugar. Sift flour mixture over top, a little at a time, and fold in lightly with down-up-over motion. Bake in 10-inch ungreased angel-cake pan at 375° (moderate) for about 35 minutes. Frost cake with seven-minute frosting. Decorate sides of cake with pink-tinted coconut. Decorate top of cake with alternate yellow and pink Jordan almonds.

Orange-Endive Salad (Makes 8 servings)

- ½ bunch curly endive
- 2 large oranges, peeled and sectioned
- 1 grapefruit, peeled and sectioned
- ½ large Bermuda onion, sliced
- 1 clove garlic
- ½ cup salad oil
- 3 tablespoons tarragon vinegar
- 1½ teaspoons sugar
- 1½ teaspoons salt
- 1½ teaspoons paprika

Tear endive into bite-size pieces in large salad bowl. Arrange orange and grapefruit sections and onion slices over endive. Combine garlic, salad oil, vinegar, sugar, salt, and paprika in bottle; shake well. Remove garlic and pour dressing over salad until endive, fruit, and onion slices are just moistened. Toss lightly. Serve at once.

Yeast Rolls (Makes 2 dozen)

- 1 cake compressed yeast or 1 package active dry yeast
- ¼ cup water
- 1 cup milk, scalded
- 2 tablespoons shortening
- 2 tablespoons sugar
- 1 teaspoon salt
- 3½ cups sifted flour
- 1 egg

Soften compressed yeast in lukewarm water (85°), active dry yeast in warm water (110°). Combine milk, shortening, sugar, and salt; cool to lukewarm. Add 1½ cups of the flour and beat until very smooth; add softened yeast and egg and mix well. Gradually stir in remaining flour to make a soft dough; beat vigorously. Cover and let rise in a warm place until doubled in bulk, about 2 hours. Turn out on lightly floured surface and shape into rolls. Let rise until doubled in bulk. Bake at 400° (hot) for 15 to 20 minutes until golden brown.

Parsley Carrots (Makes 8 servings)

- 2 pounds whole carrots
- 2 tablespoons melted butter

Cook whole carrots for 20 to 30 minutes in gently boiling water. Drain and add melted butter. Garnish with parsley.

Sweet-potato Puffs (Makes 8 servings)

- 2 cups mashed sweet potatoes
- 1 teaspoon salt
- ⅛ teaspoon pepper
- 8 pineapple tidbits
- ½ cup crushed corn flakes
- 8 pineapple slices

Season mashed sweet potatoes with salt and pepper. Form into 2-inch balls with a pineapple tidbit in the center of each ball. Roll in corn flakes. Fry in deep hot fat (375° on a deep-fat thermometer) until brown (about 3 minutes). Serve on pineapple slices.

[*Turn to page 106*

→

Honey-glazed Ham, **with pineapple-filled Sweet-potato Puffs, competes with the Coconut Angel Cake for the center of attention at this Easter dinner for those "special guests"—your family!**

For more colorful garnishes, see page 106

Color photograph: Photography, Inc., Snook

"Some like cake hot...Some like cake cold"

says: Betty Crocker

Hello—and how are you? There's a pleasant controversy that ranges around my kitchen every now and then. Is a cake something to eat hot—fresh and warm and tempting-fragrant—just as you take it from the oven?

Or is a cake something to be iced up like that pretty thing across the way and saved for "special"?

How do YOU vote?

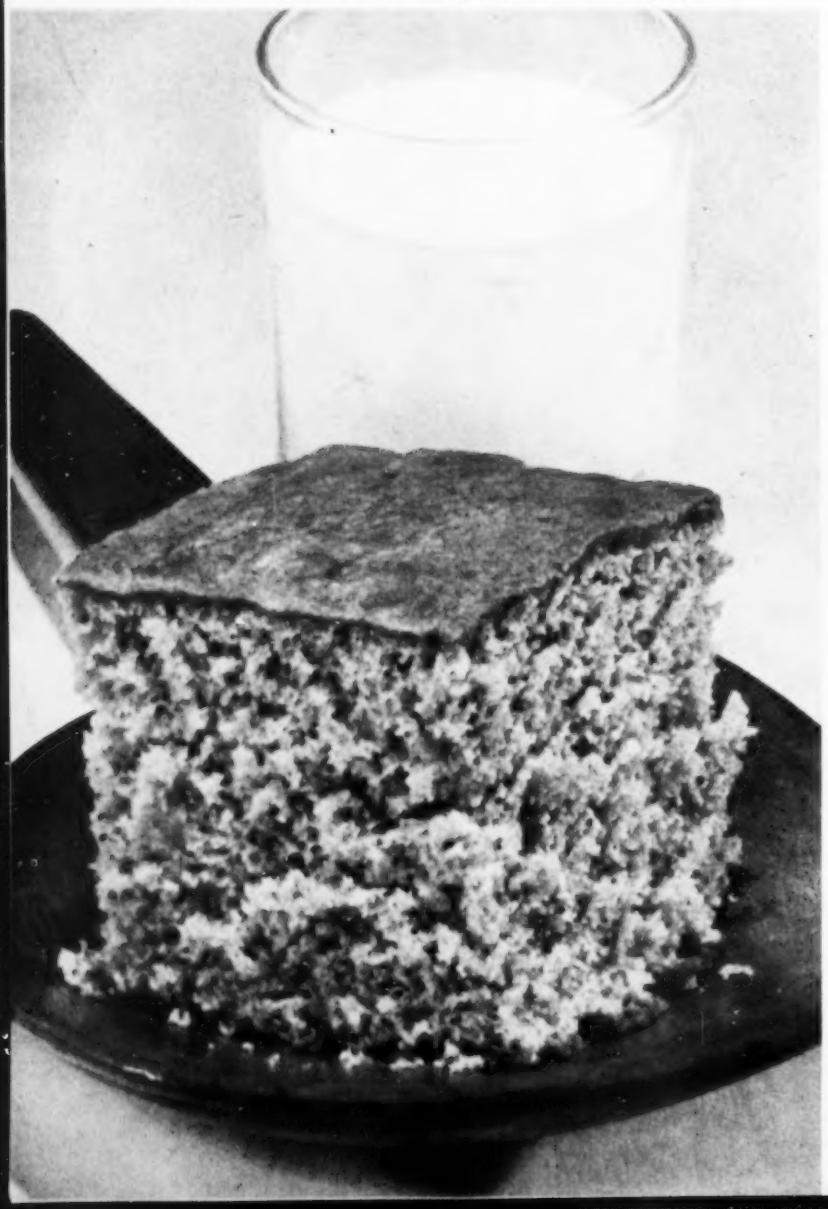
Now you take my Honey Spice Cake Mix. Add a couple of your own fresh eggs. And you get a cake so spicy-fragrant it's hard for anyone to wait for that cake to cool off. Folks write they pop it in the oven for breakfast or for after-school snacks with tall glasses of milk. Or they bake one for the evening while they're washing up the dishes, and it's ready to pass around later on.

Yes, there's a lot to be said for eating cake warm. 'Specially when it's as good a cake as you're sure to get when you bake with one of my Betty Crocker Cake Mixes. (We've worked so hard to get those mixes right, you know, that now we can guarantee your cake will come out perfect every time!)

But there's something to be said for cold cake, too. Take Easter dinner. Or somebody's birthday. Or spring parties. Then it's fun to put a lemon filling (made with any packaged pudding) between two layers of my Betty Crocker White Cake, just like the picture across the way.

And the icing's so simple—you just cream $\frac{1}{3}$ cup soft butter or other shortening and 3 cups of *sifted* confectioners' sugar. Stir in until smooth about 3 tbsp. cream and $1\frac{1}{2}$ tsp. vanilla. Save $\frac{1}{2}$ cup of icing for flower decorations. Spread the rest on sides and top of cake. There you are!

Warm! Fragrant! Wonderful! It's Betty Crocker's Honey Spice



WANT TO MAKE ROSES?

You can, you know. Anybody can! These are icing roses, and they're fun to make. All you do is add a drop of yellow food coloring to the $\frac{1}{2}$ cup of icing you've saved.

Now you put a gumdrop on a toothpick. Hold the toothpick in your hand. With the other hand fill the tip end of a teaspoon with yellow icing, smooth it off along the edge of the cup, and draw your spoon gently down over the gumdrop. Off comes one petal, as slick as you please.

Another spoonful, another petal. Keep it up around the gumdrop. Add a second row for luck. You won't believe how easy it is to make these roses until you get a bag of gumdrops and find out.

One rose looks pretty on a cup cake for a spring shower. And any Betty Crocker Cake Mix turns out perfect cup cakes!

Smooth off icing in tip of teaspoon along edge of cup.

Draw spoon down over gumdrop — there's your petal!

So bake a cake—and go off to a picnic. Or bake a cake—and pin a rose on it—and you! Two gay suggestions for an April day.

Meanwhile . . . just where did we get on our hot or cold question?

I think I know. Some like it hot. Some like it cold. And it's so easy to have good cakes all the time now, with my Betty Crocker Cake Mixes, that you can have your cake both ways . . . and often . . . in your house.

I do hope you do just that,

Betty Crocker
OF GENERAL MILLS

P.S. And my warm good wishes to you!

Spring song—Betty Crocker white cake with easy icing roses. See recipe across the way

Betty Crocker *says:* I guarantee—

A perfect cake every time you bake

...cake...after cake...

after cake!

PERFECT? Yes, I DO mean perfect. You be the judge. If a cake you make with a Betty Crocker Cake Mix is less than perfect, write Betty Crocker, Box 200, Minneapolis, Minn., and General Mills will send your money back!

IT'S NEW! IT'S BLUE! IT'S cheer

The only suds with BLUE-MAGIC WHITENER

...washes clothes so clean, so white YOU DON'T NEED BLUING or BLEACH

Guaranteed by Good Housekeeping

First and only washday detergent of its kind!

Exclusive! Science gave new blue CHEER—and CHEER alone—the amazing *Blue-Magic whitener.* Now you can whiten whites and brighten colors in the newest, safest, most modern way.

White without bluing! Imagine—new CHEER with its Blue-Magic whitener, all by itself, washes clothes so wonderfully white you'll never need bluing again!

White without bleach! It's true—except for problem stains, you don't even need to bleach! And CHEER is so *safe* for your washable colors. Actually gives them new brightness!

See the proof in your washer! CHEER's magic blue granules snap into instant white suds. No wonder so many women find CHEER gives them the radiantly clean, white washes they've always longed for. And *without* bluing or bleach!

Great for both automatic and conventional washers

Procter & Gamble's

cheer

The one and only

BLUE-MAGIC SUDS

Change to CHEER for dishes, dairy utensils, too!

Glasses, dishes dry "twinkle-clean"... without wiping. New CHEER helps prevent formation of milkstone on dairy utensils. CHEER is so mild on your hands!

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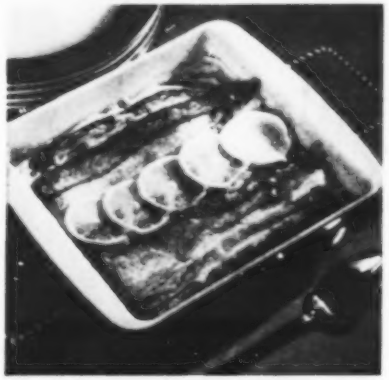


Lemon-baked Fish (Makes 4 to 6 servings)

- 1 pound frozen haddock, thawed
- 1 lemon, sliced
- 1 teaspoon salt
- Dash of pepper
- ¼ cup butter
- Dash of paprika

Place fish (you could also use perch, whitefish) in baking dish. Arrange lemon slices over fish. Combine salt, pepper, butter, and paprika; pour over fish. Bake at 350° (moderate) for 20 minutes or until fish is tender and flaky.

—*Mrs. Tom Neeley, Missouri*

Sweet-sour Tuna (Makes 4 servings)

- 1 8-ounce can pineapple tidbits, drained
- 1 tablespoon butter
- ⅓ cup pineapple syrup
- 1 cup green pepper, cut in ½-inch pieces
- 2 tablespoons sugar
- 1 tablespoon cornstarch
- 1 teaspoon soy sauce
- 1 tablespoon vinegar
- ½ cup chicken bouillon
- ¼ teaspoon salt
- Dash of pepper
- 1 6½- or 7-ounce can tuna, drained
- Chow mein noodles

Sauté pineapple in butter for 5 minutes. Add pineapple syrup and green pepper. Cover and simmer for 10 minutes. Mix sugar, cornstarch, soy sauce, vinegar, bouillon, and seasonings. Add to pineapple. Cook, stirring constantly, until thick. Add tuna. Heat and serve over crisp noodles.

—*Mrs. Ola Garrison, Illinois*

Golden Baked Fish (Makes 3 servings)

- 1 teaspoon salt
- ¼ cup milk
- 1 ½-inch-thick halibut steak
- ¾ cup crushed corn flakes
- 1 tablespoon melted butter

Dissolve salt in milk; dip fish in milk, then in cornflakes. Pour butter over fish. Bake on a greased cooky sheet at 400° (hot) for 20 minutes. Serve with tartare sauce or wedges of lemon.

Yeast-roll favorites

Delicious Crispies (Makes 2½ dozen rolls)

- 1 package active dry or 1 cake compressed yeast
- ½ cup water
- ½ cup sugar
- ½ cup shortening
- 1¼ teaspoons salt
- 1 cup milk, scalded
- 5 to 6 cups sifted flour
- 2 eggs
- 1 teaspoon lemon flavoring
- ½ cup soft butter
- 1 cup sugar
- 1 tablespoon cinnamon
- ½ cup sugar

Soften active dry yeast in warm water (110°), compressed yeast in lukewarm water (85°). Add ½ cup sugar, shortening, and salt to scalded milk. Cool to lukewarm. Add 2 cups flour and beat well. Add eggs, softened yeast, and lemon flavoring. Beat until blended. Add remaining flour to make a soft dough. Knead until smooth. Place in a greased bowl, turning once. Cover and let rise until almost doubled (about 1½ hours). Roll dough out to ¼-inch thickness on lightly floured surface. Spread half of dough with ⅓ of butter and ⅓ of the 1 cup of sugar. Fold in half and roll out. Spread with another ⅓ of butter and sugar. Fold over, roll out again, and spread with remaining butter and sugar. Fold over and roll out again. Mix together ½ cup sugar and 1 tablespoon cinnamon. Sprinkle half the mixture over dough. Roll up as for jelly roll. Cut in ½-inch slices. Place on greased cooky sheet and flatten with palm of hand. Sprinkle remaining cinnamon-sugar mixture over tops. Let rise about 30 minutes. Bake at 400° (hot) for 10 to 12 minutes. Remove from baking pan as soon as they're out of the oven. They're delicious served either warm or cold.—*Mrs. Julius M. Alby, Minnesota*

Easy Yeast Rolls (Makes 3 dozen rolls)

- 2 packages active dry or 2 cakes compressed yeast
- ½ cup water
- ⅓ cup sugar
- 1 tablespoon salt
- 3 tablespoons melted shortening
- 1½ cups lukewarm water
- About 7 cups sifted flour
- 1 well-beaten egg

Soften active dry yeast in warm water (110°), compressed yeast in lukewarm water (85°). Combine sugar, salt, shortening, and 1½ cups lukewarm water. Add half of flour; beat well. Mix in yeast, then egg. Add remaining flour to make a moderately soft dough; mix well. Knead until smooth. Place in a greased bowl, turning once. Cover with a damp cloth. Let rise in a warm place until doubled (about 50 minutes). Punch down; let rest 5 minutes. Shape into rolls; arrange in greased muffin pans or on greased cooky sheet. Cover and let rise until doubled. Bake at 400° (hot) for 20 to 25 minutes.

—*Mrs. Arda Watson, Pennsylvania*

Honey Twists

- 1 package active dry or 1 cake compressed yeast
- ¼ cup water
- 1 cup milk, scalded
- ¾ cup shortening
- ½ cup sugar
- 2 teaspoons salt
- 5 to 6 cups sifted flour
- 2 eggs (reserve 1 white)

Soften active dry yeast in warm water (110°), compressed yeast in lukewarm water (85°). Mix milk, shortening, sugar, and salt; cool to lukewarm. Add half the flour; beat well. Add yeast and beaten eggs; blend. Add remaining flour to make a moderately soft dough; knead 3 minutes. Place in a greased bowl, turning once. Let rise until double (about 1½ hours). Punch down; divide in half. Shape into long rolls about an inch in diameter. Coil in 2 greased 8-inch round cake pans. Brush with honey topping and let rise (about 1 hour). Bake at 375° (moderate) 20 to 30 minutes. *Topping:* Cream together ¼ cup butter, ⅔ cup confectioners' sugar, 1 egg white, and 2 tablespoons honey.—*Mrs. Della De Caigny, Minnesota*

Seafood specials

When Lenten meals get a bit dull, pep them up with these extra-good seafood recipes

Super Salmon Casserole
(Makes 4 to 6 servings)

- 1 1-pound can of salmon, undrained
- 1½ cups dry bread crumbs
- ¼ cup chopped green pepper
- 2 eggs, slightly beaten
- 1 can condensed cream of celery soup
- 2 tablespoons chopped pimiento
- 1 teaspoon onion juice
- ½ cup chopped celery

Combine ingredients. Pour into a 1-quart casserole. Bake at 350° (moderate) for about 1 hour.

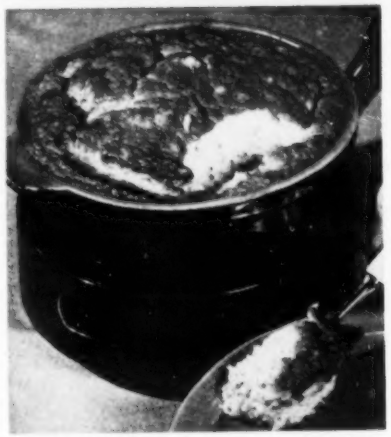
—*Miss Bertha Rohrich, Nebraska*

Fluffy Tuna Soufflé (Serves 4 to 6)

- 2 tablespoons butter
- 3 tablespoons flour
- ¼ teaspoon thyme
- ¼ teaspoon curry powder, if desired
- ¼ teaspoon salt
- Dash of pepper
- 1 cup milk
- 2 6½- or 7-ounce cans tuna, flaked
- 3 tablespoons minced onion
- 4 egg yolks, beaten
- 4 egg whites, stiffly beaten

Melt butter; blend in flour and seasonings to a smooth paste. Gradually add milk; cook, stirring constantly, over low heat until smooth and thickened. Remove from heat; add tuna and onion. Fold in beaten egg yolks, then stiffly beaten egg whites. Pour into a 1½-quart casserole. Bake at 325° (slow) for 1 hour.

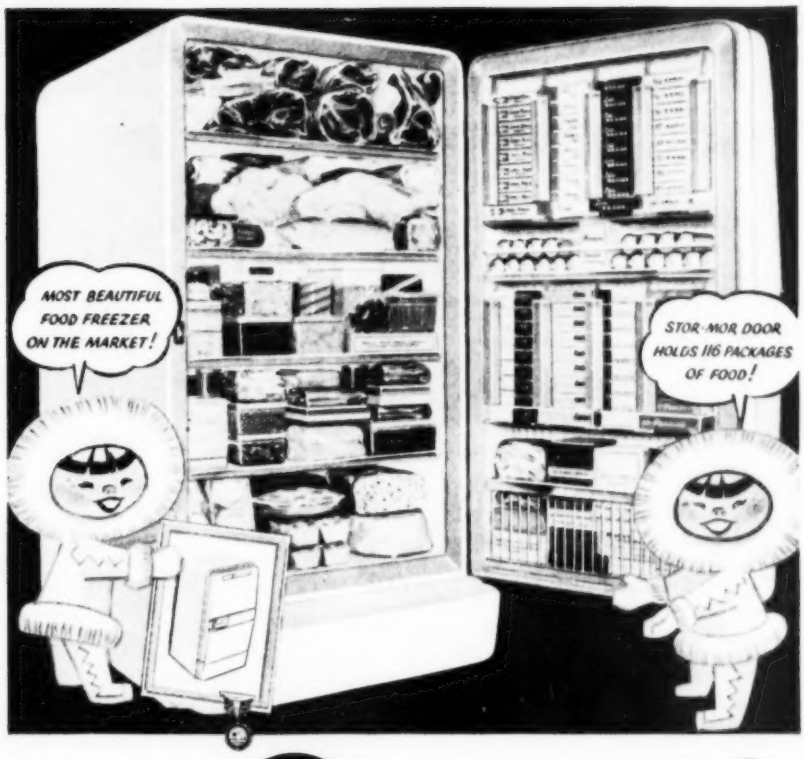
—*Mrs. Harry C. Denver, California*



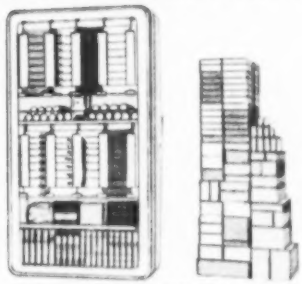
See Amana First... NEW FOOD FREEZER GUARANTEED TO OUTPERFORM ALL OTHERS -

FREEZES FASTER AT LESS COST - MAINTAINS EVEN ZERO TEMPERATURE - AND TO TOP IT ALL -

Amana Stor-Mor* Door!



Try Getting 116 Packages in the Door of Any Other Freezer!



AMANA (19.6 CU. FT.) HOLDS 116 PACKAGES!
AMANA (15.4 CU. FT.) HOLDS 79 PACKAGES!

FREEZER A (14 CU. FT.) HOLDS 36 PACKAGES
FREEZER B (13 CU. FT.) HOLDS 30 PACKAGES
FREEZER C (12.5 CU. FT.) HOLDS 21 PACKAGES

4 times more "up front" storage—The Stor-Mor Door gives you 4 times more "easy-to-see," "easy-to-reach" storage . . . almost a month's supply of food . . . the greatest amount ever possible in *any* freezer!

Dispensers serve packages automatically—at a flick of a finger! Food is served in correct order automatically—first package stored is the first package served.

Full-vision light—illuminates freezer interior. No more fumbling or searching.

Most beautiful design—gracefully styled. Exterior is rich gold and chrome. Interior features glacier green and gold trim.

Costs as little as $2.85 a week to own . . . after small down payment. See your Amana dealer today.

Amana Guaranteed to Outperform all others!

19.6 CU. FT. 15.4 CU. FT. 11.7 CU. FT. 8 CU. FT. 14 CU. FT.

Freezes food faster
"Single unit" construction of seamless refrigeration tubing and aluminum shelves freezes food faster than any method known in home freezing.

Keeps food safer
6 freezing surfaces—all food is on or directly below a prime freezing surface. The Amana design creates "even zero" temperatures in every part of the freezer.

Costs less to operate
The scientific design of the Amana permits the Powerpact Freezing Unit to freeze so fast it operates only a fraction of the time required by ordinary freezers.

*Only Amana has the exclusive patented Stor-Mor Door. **AMANA REFRIGERATION INC., AMANA 13, IOWA**

Amana FOOD FREEZERS

World's Largest Manufacturer of Food Freezers
Backed by a century old tradition of fine craftsmanship

an ACCO product

NEW WEED
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ALL-SEASON, ALL-JOB FARM TRACTOR CHAINS

★ **Constant traction** on mud, snow, ice or frozen ground.

★ **One chain** for every job—plowing under slippery cover crops, moving equipment from muddy fields, clearing snow from lanes and driveways, etc.

★ **No balling or tightening** on the tire—self-cleaning.

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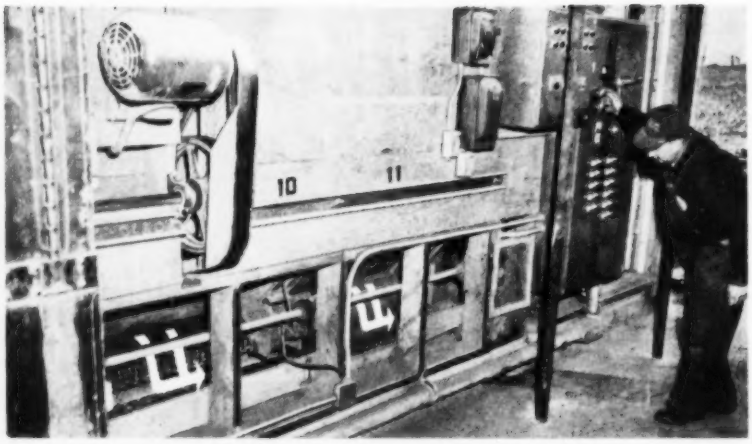


Metal-mesh apron over flat bottom of each bin carries off thin layer of grain, concentrates, pellets at rate for proper ration. Arrows show route ingredients take on 14" apron toward electric-driven hammer mill. Cams control ratchets on the apron

New idea in automatic feed handling

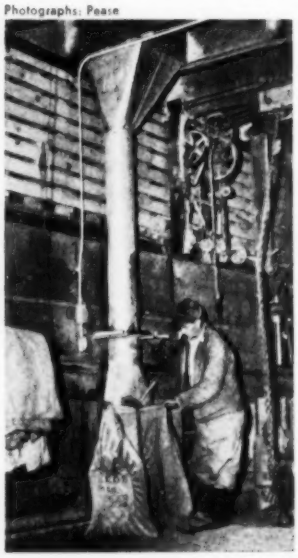
By David Flynn

It's really "push-button" feed handling you find on Ed Eichler's Fin 'N Feather Farm, Kane County, Illinois. Although it has many of the conveyers and augers you'd expect, agricultural engineers of the Commonwealth Edison Company designed the system around self-emptying, flat-bottomed bins. No space-consuming hopper-bottom bins are needed. When the ratchet-operated metal apron in a bin moves, ration ingredients are measured out at the bottom.

Each bin has an inspection door. Wood slats keep grain and concentrates in if the bin is only partially full

Ingredients from bins maintain identity until 14" conveyer dumps them. Vertical auger mixes, raises grains to hammer mill for grinding

Photographs: Pease



Overhead storage bins take ground mixed rations, on trip from mill, from cross conveyer near roof. All feed movement and grinding is automatic and controlled by control panel shown in the top photo

"Does a Lot More Work and Saves Me Money, Too!"

This is not just one farmer's opinion. You'll hear statements like this from owners wherever today's Ford Tractor has had a chance to show what it can do. Here are a few typical examples:

A Minnesota Ford Tractor owner has this to say: "I have some light and some fairly heavy soil. I have never used more than 1½ gallons per hour pulling three 14-inch bottom plows and you can cultivate 20 acres on 5 gallons. That puts money in any farmer's pocket."

From a farmer in New York State: "I like the new Ford Tractor because we have a very hilly farm and the Ford has lots of power, low down, good brakes, very easy to handle, cheap to operate."

An Indiana farmer says: "I plowed 150 acres of land with my new Ford Tractor; 100 acres of this was corn and the other 50 acres was oats. This was more farming than many of my neighbors did . . . with larger tractors."

Here's one from Nebraska: "I can make my Ford Tractor do as much work on less fuel than any other make of 3-plow tractor which costs twice as much money."

A grain farmer in Missouri wrote us this about his new Ford: "It will do more work per gallon-hour than any other tractor regardless of make or size and I don't bar the big boys either."

And from a general farmer in Oregon: "The Ford Tractor has everything a man could ask for in size, power, handling and economy."

These few statements will give you some idea what owners of today's Ford Tractor are saying—and perhaps of what you'd be saying if you owned a Ford. How about arranging with your nearby Ford Tractor Dealer for a demonstration? Tractor and Implement Division, Ford Motor Company, Birmingham, Michigan.

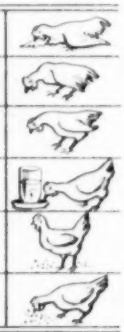
Lower first cost, proved operating economy and higher resale value make the Ford Tractor your best power buy

Ford Farming MEANS BETTER WORK... MORE INCOME PER ACRE

Experiment Station Tests Prove Heat Robs Farmers!

Agricultural experiment stations throughout the country have proved that hot weather takes the profit out of poultry raising. Heat reduces feed consumption, lowers growth rates, cuts egg production, egg size and shell strength. Broilers come to market with less fleshing. Heat prostration kills both broiler and laying flocks.

Inside Temperature	Result
100° - plus	Extreme danger. Use emergency measures at once.
95° - 100°	Heat prostrations most likely. Consider emergency measures.
90° - 95°	Greatly reduced feed consumption; heat prostrations may be encountered among layers but very few among broilers
85° - 90°	Further reduction in feed consumption; increased water consumption; only slight danger of heat prostrations.
80° - 85°	Slight reduction in feed consumption: no danger of prostrations.
70° - 80°	No danger.



DANGER ZONE chart, based on study made by leading state agricultural college, shows that even normal summer temperatures in the 80° are bad for birds.

Alcoa® Aluminum Roofing Your Best Protection!

Aluminum roofing keeps out up to 95% of the sun's heat rays, lowers poultry house temperatures as much as 15°. Birds are kept cooler and more productive when temperatures range into the normal summertime eighties, have a better chance to survive when they soar into heat-wave nineties.

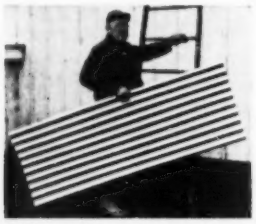
Alcoa Aluminum Roofing protects your pocketbook in other ways, too. The alloy from which it is made is a product of 29 years of experiments to develop greatest corrosion resistance. It combines light weight for ease of construction with rugged strength for increased holding power. Produced under rigid quality controls, each sheet is inspected after each production step to insure uniform high quality.

If you're planning to build or re-roof your poultry houses or any of your farm buildings, see your local Alcoa Roofing dealer.

He can help you estimate your needs, give you helpful application tips, see that you get the most for your money—Alcoa Aluminum Roofing. ALUMINUM COMPANY OF AMERICA, 2111-D Alcoa Building, Pittsburgh 19, Pennsylvania.

EXPOSURE TESTS in all parts of U. S. prove new Alcoa Aluminum Roofing has greatly increased corrosion resistance, longer life.

OWNER REPORTS losing only 58 broilers under aluminum roof like this, 960 under ordinary roof during summer heat wave.



LIGHT WEIGHT of Alcoa Aluminum Roofing speeds construction; strength allows open decking—savings in lumber for sheathing.

ALCOA ALUMINUM

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2111-D Alcoa Building, Pittsburgh 19, Pa.
Please send me (free of charge—without obligation) the Alcoa Farm Roofing Manual.

Name _____

Address _____

City _____ State _____

Faster, lower-cost corn planting

From page 49

where the farmer wants to seed either legumes or wheat between the rows. We have illustrated (center, top, pages 48 and 49) one way to set it up.

Another way to round-plant is to plant your center rows right on out to the corners and eliminate the crescent-shaped short rows we suggest in step 2 of the diagram on page 49.

We've told you about *wheel-track* planting before in *Successful Farming*, most recently in November 1953, page 80, "Tractor wheels make the seedbed."

This new system of raising corn can save you time and cash. George Fritz of Gobles, Michigan, says the method saves him six operations—2 double discings, 2 draggings, and 2 cultivations. He estimates that each operation costs him $1.50 per acre or a total saving of $9, *plus his working time.*

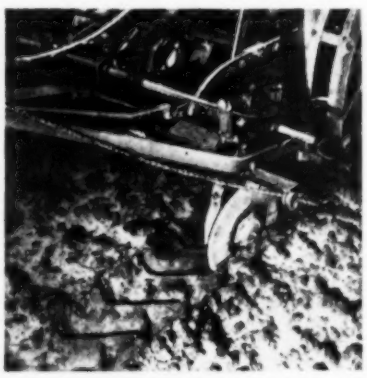
The method was first developed by Andy Shugers and Jim Howe of Van Buren County, Michigan. Dr. Ray Cook, head of the Michigan State College soils department, has also conducted successful tests with it. Tests by Jim Haynes of Ohio State University and other tests, in Illinois, resulted in yields equal to regular methods.

You probably won't want to plant all your corn this way the first year, but you can try it on an acre or two. Here's how:

Delay plowing until a day or two before planting. The more your soil tends to bake, the sooner you should plant after plowing. Michigan farmers have tried to plow 2 inches deeper than usual.

After plowing, plant without *any* further seedbed preparation. But use either a narrow tractor, or go according to our diagram on page 48 for larger tractors. *The planter must be drawn behind the tractor so that the shoes or openers track exactly in the center of the tractor-wheel marks.* Michigan farmers who plant this way every year have gone to a disc-type planter shoe (see photograph, below), but regular shoes will do for a test.

Where the ground, after plowing, has



Close-up of disc-type opener in tractor wheel track. This was used by James Howe, Michigan, planting corn in spring of '53

been extra rough, farmers have gone over it once with a disc before planting.

The tractor wheels crush clods and make a firm seedbed for the corn. Your only additional operations to produce a corn crop are cultivation.

Easier weed control has been another big advantage of this wheel-track system. Farmers who've planted corn in this way can often wait until the corn is knee high before cultivating the first time. *They especially like this because it takes the pressure off the haying season.* They then cultivate twice in quick succession—laying the corn by the second time.

Those who've tried it also claim they have less erosion. Tests have shown that ground left rough slows runoff.

Wheel-track planting yields a crop of corn in just four trips across a field—plowing, planting, and two cultivations. It offers the greatest opportunities for cost savings of any method we've seen.

Whether you try wheel-track planting, around-the-field, or any of the other ideas we've described, you'll make some progress on easing the cost squeeze in corn raising. **END**

New facts about bugs, bug killers

From the annual meeting of the Entomological Society of America come these reports of interest to farmers.

Dry sugar baits look good for fly control. James B. Gehen of the United States Department of Agriculture worked with baits containing malathion, diazinon, and Bayer L13/59, and found that 100 grams of the dry bait per barn gave good kills. The baits are applied with salt-shaker type distributors.

Prof. D. A. Wilbur of Kansas State College found that keeping market grains in buildings separate from ground livestock feed and feed grains was more important than either good bin construction or general sanitation. His three-point program for keeping grain clean consists of: (1) isolation, (2) cleanup of bins, and (3) bin spraying.

Research continues with insecticides which, when taken into the plant, kill sucking insects. Dr. R. L. Metcalf of the California Experiment Station reported these systemic bug killers continue to look promising on cotton, nursery stock, seed crops, and ornamentals. These cannot yet be used on food crops until the residue hazard is determined.

Work is continuing with high-frequency energy for control of insects in wheat. The cost of an effective treatment now runs about 5 cents per bushel. U.S.D.A. and Kansas researchers are working toward a cost of 1 and 2 cents per bushel.

ANNOUNCING PHILLIPS 66

Flite-Fuel

FOR YOUR CAR!

A PHILLIPS EXCLUSIVE! **For the first time, you can enjoy the benefits of the super aviation gasoline component—di-isopropyl (*pronounced di-iso-pro-pull*). No other gasoline has this super power ingredient. It is available only in Phillips 66 Flite-Fuel.**

Until recently, the use of super aviation gasoline components was restricted by the United States Government to high octane, high performance aviation gasoline. They were needed to give our planes a tremendous power surge in aerial combat. Now military authorities have released restrictions on the use of these power-packed aviation gasoline components. So Phillips is able to use not only di-isopropyl but also HF Alkylate, both originated and first manufactured by Phillips. That's why Phillips can bring you this great new gasoline—Phillips 66 Flite-Fuel.

YOU GET ALL THESE BENEFITS:

- **Increased power**
- **Smoother acceleration**
- **Greater fuel economy**
- **Higher anti-knock quality**
- **Freedom from stalling**

plus

- **Famous Controlled Volatility, and the extra clean burning features of Phillips 66 Gasoline**

Let your car's performance tell the story. Get Phillips 66 Flite-Fuel at any station displaying the orange and black Phillips 66 Shield.

PHILLIPS PETROLEUM COMPANY, *Bartlesville, Oklahoma.*

Phillips 66

PHILLIPS 66

Flite-Fuel

FOR YOUR CAR

See how

Soda serves more ways than any other household product

You'll find baking soda (bicarbonate of soda) saves you time, work and money in more than 101 ways. Keep a package in the kitchen to make light of dozens of household chores . . . a package in the medicine cabinet for first aid and dental care.

An economical tooth powder! Brush your teeth regularly with bicarbonate of soda (baking soda). It's the most economical tooth powder you can use . . . cleans your teeth *thoroughly, safely.* Soda neutralizes enamel-eating acids and removes bad breath that starts in the mouth.

A soothing gargle and refreshing mouthwash! To cleanse throat and mouth, dissolve one or two teaspoons of soda in a glass of water and gargle. Soda helps *sweeten breath,* leaves your mouth feeling clean . . . so "wide-awake" fresh.

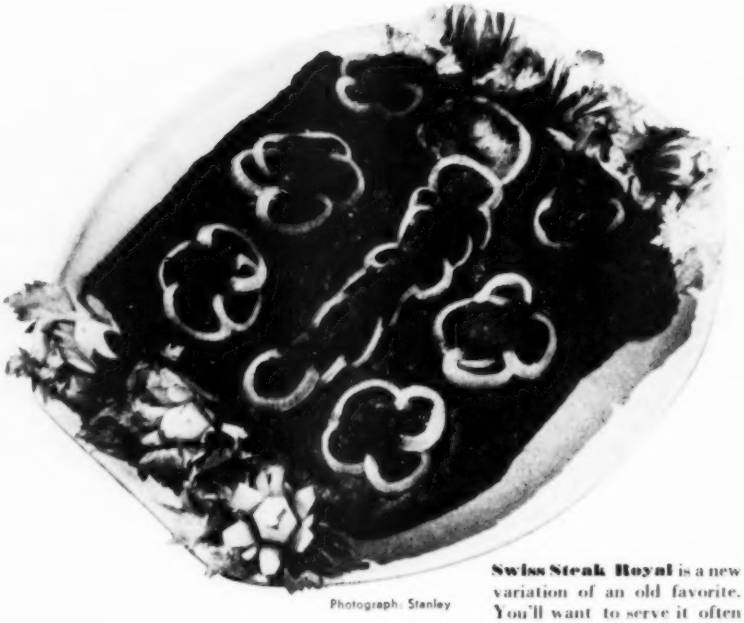
New handy size with metal pour-spout!

Now—you can get Bicarbonate of Soda in specially designed, water-repellent package, just the right size for your *medicine cabinet* . . . convenient for *travelling,* too! Available in health and beauty aids departments of grocery stores.

A Household Treasure

Why buy a number of different products to do a number of different jobs when baking soda (bicarbonate of soda) does them all and costs only pennies a box?

Arm & Hammer and Cow Brand Baking Soda are pure Bicarbonate of Soda, U.S.P. Write for **Free Booklet** on the many uses of soda to Church & Dwight Co., Inc., 70 Pine Street, New York 5, New York.



Photograph: Stanley

Swiss Steak Royal is a new variation of an old favorite. You'll want to serve it often

Round steak . . . *fit for a king!*

Steak every night? It is possible and economical if you consider the many good-to-eat ways to fix round steak. Treat it properly when you cook it (slow, moist cooking is the trick), and you'll have a meat dish that truly is fit for royalty. If round steak is already a favorite, we suggest these two different and extra-good ways to fix it. But try all six recipes—we think they're especially good.

Swiss Steak Royal (Serves 4 to 6)

- 2 pounds round steak, ¼ inch thick
- ⅓ cup flour
- 2 cups sliced onion
- 2 tablespoons fat
- 1 teaspoon dry mustard
- 2 teaspoons salt
- ¼ teaspoon pepper
- 1 clove garlic, minced
- ½ cup water
- ½ cup cooked or canned tomatoes

Pound flour into steak. Fry onion in hot fat in skillet. Remove onion. Add steak and brown on both sides. Cover with onion. Add remaining ingredients; cover. Simmer for about 1½ hours or until tender. Arrange on a hot platter and garnish with vegetable relishes.

Chicken-fried Round Steak (Makes 6 servings)

- 1½ pounds round steak, ½ inch thick
- 1 egg, beaten
- 1 tablespoon milk
- ¾ cup yellow corn meal
- ¾ teaspoon salt
- Dash of pepper
- ¼ cup fat
- ¾ cup water

Pound steak with meat pounder. Cut into serving pieces. Mix egg and milk. Dip meat into egg mixture, then into corn meal mixed with salt and pepper. Brown on both sides in hot fat. Add water. Cover and cook over very low heat for 45 to 60 minutes. Check from time to time to be sure meat does not burn. This is a good-to-eat quickie you'll want to serve often.

Barbecued Beef-steak Strips (Makes 6 to 8 servings)

- 2 pounds round steak, ½ inch thick
- 3 tablespoons prepared mustard
- 2 tablespoons flour
- ⅓ cup fat
- 1 clove garlic, minced
- ½ cup chopped onion
- ¼ cup finely chopped celery leaves
- ¼ cup finely chopped parsley
- 1 8-ounce can (1 cup) tomato sauce
- ¼ cup vinegar
- 1½ cups water
- 2 tablespoons brown sugar
- ½ teaspoon salt
- ¼ teaspoon cayenne

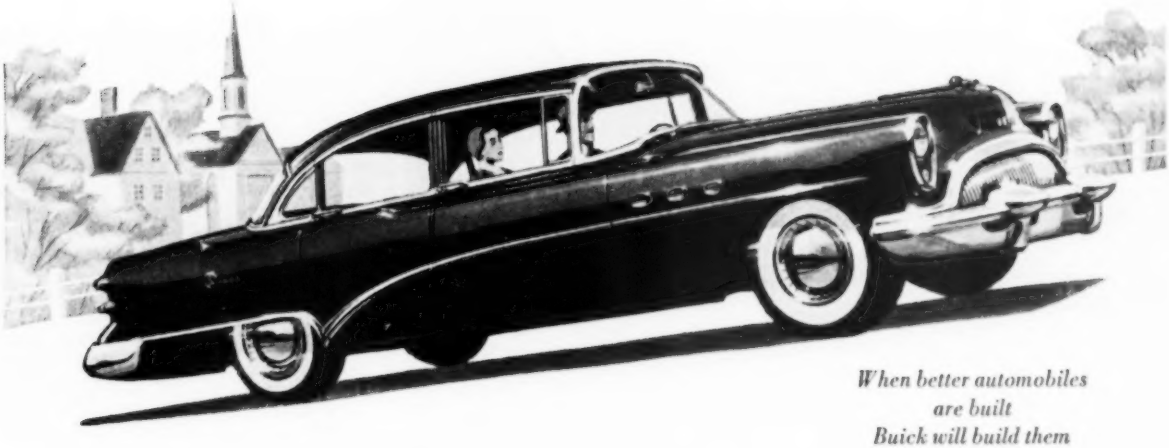
Cut meat into strips 3x1½ inches. Toss in bowl with mustard; roll in flour. Brown in hot fat. Move strips to one side of skillet. Brown garlic and onion in fat in which meat was browned. Stir in remaining ingredients; bring to a boil. Simmer covered for 15 minutes. Uncover and simmer about 1½ hours or until meat is tender and sauce is thickened. Serve with hot, fluffy rice.

Beef Roll-ups (Makes 4 servings)

- 1 pound round steak, ¼ inch thick
- Salt and pepper
- ¼ cup flour
- Bread stuffing
- 2 tablespoons fat
- 2 cups water
- ⅓ cup sliced stuffed olives

Season meat with salt and pepper.

More recipes on page 80



When better automobiles are built Buick will build them

It's got *Power* and you've got *Room*

but that's only the beginning!

THERE'S no need to tell you this gay and gorgeous beauty has a fresh new symmetry of line that gives the rest of the auto industry something to shoot for in future years.

You can see that for yourself. And you can also see, if you look more closely, a magnificent sweep of glass that was found only on "cars of the future" a year ago.

But there are many more reasons for the soaring success of the 1954 Buicks—the most completely new cars to come on the market in many a year.

Take, for example, the particular Buick pictured here—the 4-door SUPER Sedan.

You'll find that it has the highest horsepower ever put in a SUPER — the upsurging power of Buick's high-compression vertical-valve V8.

Open its wide-swinging doors—also new—and you'll discover more interior room than there was in its popular predecessor, which *was* the roomiest six-passenger sedan in America.

Notice where that panoramic windshield meets the hood, and you'll find a new ventilation system — which brings in fresh air high above the fumes and heat of the pavement.

Then, just for extra good measure, you'll find that there's new handling ease, new riding smoothness, new instrument panels, new front-end suspension, new fabrics, and a long list of other new-day advances.

Want to know more? You can have, as your extra-cost options, everything from the superb smoothness and instant getaway of Twin-Turbine Dynaflow — or the convenience of Safety Power Steering and Power Brakes — to four-way adjustable front seats, electric radio antenna operation, wire-wheel smartness.

So picking a new car this year is simple. Pick Buick—and you'll get all there is to be had—all that your heart can desire—*and a wonderful buy!* See your Buick dealer soon.

BUICK *Division of* GENERAL MOTORS

BUICK
The Beautiful Buy

MILTON BERLE STARS FOR BUICK—See the Buick-Berle Show Tuesday Evenings

Get more for your dollar!

Model Q1320, 13.2 cu. ft. Upright and chest models from 4.2 to 20 cu. ft.; write for illustrated folder.

More features in a Quicfrēz freezer: Dri-Chest construction, fast-freezing compartment, space-saving design, exterior tamper-proof controls, many others! **More beauty,** too: smart design, color styling inside and out. And **more value** — the low, low price makes you know you get more for your dollar! Don't wait for the wonderful economy of home freezer living. See your Quicfrēz dealer—and see how you save!

Quicfrēz®

manufacturers of fine refrigeration equipment for almost 50 years

Quicfrēz, Inc. · Fond du Lac, Wis.

Round steak

From page 78

Pound in flour. Cut meat in 4 pieces. Place stuffing on each piece of steak. Roll up; fasten with a toothpick. Brown in hot fat. Pour water over roll-ups. Add olives. Cover and simmer about 1½ hours or until meat is tender. *Stuffing:* Combine 2 cups dry bread cubes, 1½ tablespoons chopped onion, ½ teaspoon salt, dash of pepper, dash of poultry seasoning, and sage to taste. Add 2½ tablespoons melted butter. Toss gently to mix.

Beef Cubes in Sour Cream
(Makes 4 servings)

- 1 pound round steak, cut in 1-inch cubes
- 2 tablespoons flour
- 2 tablespoons fat
- ⅓ cup chopped onion
- 1 10¾-ounce can consomme, undiluted
- ⅓ cup water
- 2 tablespoons flour
- ¼ cup sour cream

Dredge meat cubes in flour. Brown meat in hot fat in skillet. Add onion, consommé, and water. Cover and simmer for 10 minutes. Uncover and simmer 30 minutes longer or until meat is tender. Thicken gravy with flour combined with small amount of cold water; add sour cream. Heat and serve on hot rice.

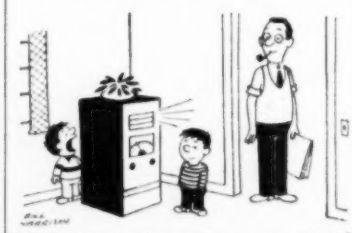
Savory Swiss Steak (Makes 6 servings)

- 2 tablespoons flour
- 1 teaspoon salt
- ⅛ teaspoon pepper
- 1½ pounds round steak, 1 inch thick
- 2 tablespoons fat
- 2 cups sliced onion
- 1 teaspoon dry mustard
- ½ teaspoon chili powder
- 1 bay leaf
- 2 teaspoons Worcestershire sauce
- 2 cups canned tomatoes

Combine flour, salt, and pepper. Pound into meat. Brown meat in hot fat. Top with onion slices. Combine seasonings and tomatoes; pour over steak. Cover and cook slowly over low heat about 1½ hours or until tender. **END**

SUCCESSFUL FARMING

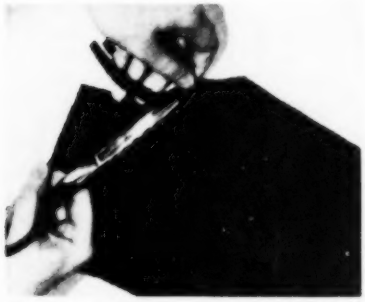
"About time for the news"



"On account of the big snow expected tonight, there will be no school tomorrow . . . I repeat . . . no school tomorrow."

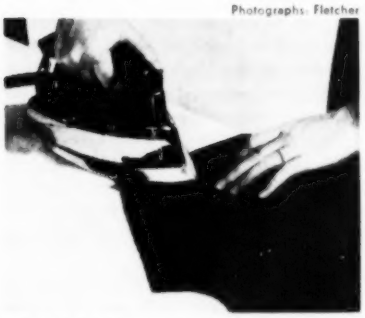
Sew like a professional

Take bulk out of woolens



Flat, smooth seams are made by "staggering" the seams after stitching. Trim one thickness of the seam to half the width of the other. With seams trimmed to form a "stairstep," they won't make a thick ridge that shows on the outside after pressing

Photographs: Fletcher



Clip darts almost to the point formed by the stitching. Fold two halves in opposite directions and press thoroughly—now it's smooth! Gone is that bulky, homemade look

Nostalgia

Where is that old-time rapture,
The joy of early spring?
Why must the field and pasture
Seem but for harvesting—
The profit grain may bring!

The meadow lark still nests near,
His notes ring loud and clear;
The snow has found a racecourse
For ripples in shining gear—
A sunbeam's gondolier.

Still grows the fuzzy meadow
With all its strips of green—
The corn in changing landscape
With black, rich soil between—
A constant growing scene.

But the woodland of our springtime,
The walnuts of the fall,
The search for Dutchmans-breeches,
The thrush and bluebird's call—
Where have we lost them all?

—*Grace Noll Smith*

Important News for Married Women...

New "Lysol" Thoroughly Effective

for intimate use...

YET NEEDS NO POISON LABEL!

IMPROVED FOR GREATER DAINTINESS. Now, as the result of many years' work by "Lysol" scientists, this leading disinfectant has been dramatically improved in two ways. New "Lysol" has *no* poison label. And "Lysol" has a light, clean odor . . . but don't let that fool you! "Lysol" has the very same cleansing efficiency women have trusted for years. Yes, in every way new "Lysol" is a modern formula—better than ever for feminine daintiness.

CLEANSE AND DEODORIZE—SAFELY! Used in a cleansing douche, new "Lysol" kills germ life quickly, *on contact*, even in the presence of mucous matter. Yet it will not harm delicate tissues, when used according to directions for feminine hygiene.

PROTECTS EFFECTIVELY! New, improved "Lysol" is the reliable, pleasant, modern way to help protect yourself against unpleasant odor, and the risk of offense. No other liquid germicide today offers you this intimate protection more effectively, more safely. Used in a cleansing douche, it promotes complete internal cleanliness . . . helps keep you dainty, confident, sure of your charm.

Today . . . Get New-Formula

"Lysol" Brand Disinfectant

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Free! **EXPERT UP-TO-DATE ADVICE ON FEMININE HYGIENE!**

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Please send me, in plain envelope, a FREE copy of booklet, prepared in collaboration with a leading gynecologist, entitled "Don't Depend on Hearsay."

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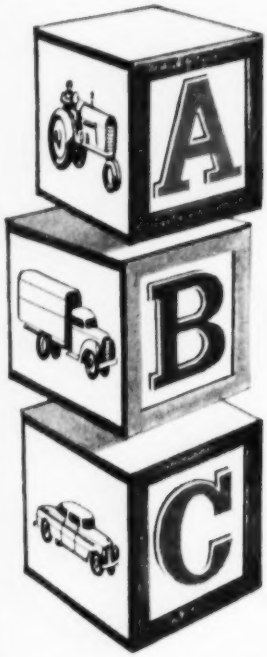
Simple as



Cylinders wear most at the TOP

Chrome-plated piston rings resist wear

Therefore, TOP rings should be chrome-plated to retard cylinder wear!

For longer engine life...fewer overhauls, obtain the FULL benefit of piston rings plated with solid chrome...not just the oil rings alone, but especially the TOP compression rings because they operate where most wear occurs.

Perfect Circle's 2-in-1 Chrome Piston Ring Set has BOTH top and bottom rings plated with thick, solid chrome. And the result? Thousands and thousands of extra hours of top performance, even under the most severe kinds of farm service!

For new engine life, sustained power and oil economy—with no tedious break-in period—re-ring your car, truck or tractor with 2-in-1! Perfect Circle Corporation, Hagerstown, Indiana; The Perfect Circle Co., Ltd., Toronto, Canada.

Perfect Circle

2 in 1 chrome piston rings

The standard of comparison

Solid chrome plating on top and bottom rings gives wear protection throughout entire area of ring travel. Only 2-in-1 furnishes alternate HiPressure spring with every oil ring, for badly worn engines.

When it comes to drouth insurance . . .

Don't overlook alfalfa

In September, 1953, the only green crop you could find in some areas of the dry Cornbelt was alfalfa. In hard-hit areas, nearly every other crop was dead.

Nobel Coats, Douglas County, Missouri, will remember how alfalfa pulled him through the drouth. He cut 3 tons of alfalfa to the acre—the only crop he got except for early spring grains.

Neal Short, Christian County, Missouri, seeded 20 acres of alfalfa in wheat in the fall of 1952. He made 10 tons of wheat-alfalfa silage before turning his cows into it when his other pastures went to pieces from the drouth.

Hundreds of other farmers were saved by alfalfa when everything else dried up. But alfalfa has another good point—whether it's dry or not. It yields well.

Alfalfa's a high yielder. On 173 central Indiana farms, alfalfa made more beef and milk per acre than bluegrass or red clover, either in pure stand or mixtures. In pounds of 4-percent milk per acre, alfalfa produced 2,383; red clover, 2,197; and bluegrass, 1,992. Converted to pounds of beef per acre, alfalfa turned out 218, red clover 202, and bluegrass 176.

Give the old stand a boost. If you have a good stand of alfalfa going into the 1954 season, here's how you can get more from it:

Missouri specialists say alfalfa weakened from the prolonged drouth last year needs a shot of fertilizer before it starts producing in 1954. Missouri's recommendation for established alfalfa stands is 400 pounds of 0-10-30 yearly. But soils tests should guide your specific fertilizer use as top-dressing this spring.

Varieties for a new seeding. If you want to establish an alfalfa stand in winter wheat or spring grains, choose one of the *certified* varieties listed below. Choose varieties bred for your area, suitable for the length of stand you want.

For an alfalfa to last more than three years in the Northern states, Ranger is

recommended. Ranger is a wilt-resistant, winter-hardy alfalfa. It's adapted as far north as Canada—as far south as a line running through central Kansas and Missouri, and southern Kentucky, Ohio, and Pennsylvania.

For an alfalfa to last more than three years in an area farther south, Buffalo is recommended. It's a high yielder, with wilt resistance and winter-hardiness.

Buffalo's adaptation is bounded on the north by central Nebraska and Iowa, and east along northern Illinois, Indiana, Ohio, and Pennsylvania. It's good as far south as southern Oklahoma, Arkansas, and Tennessee.

For a two-year stand, Atlantic alfalfa will produce good yields. It's adapted from central Arkansas, Missouri, and southeast Iowa, east to the Atlantic coast.

Vernal is a new high-yielding, wilt-resistant, winter-hardy alfalfa adapted to the same area as Ranger. Some seed of this variety will be available in 1955.

Ralph Krenzin, Iowa State College extension agronomist, recommends these seeding rates: in pure stands, 10-12 pounds an acre; with bromegrass, 6-8 pounds of alfalfa and 8-10 pounds of brome.

Best companion crops. Oats and barley are the best nurse crops for alfalfa, according to research results at Michigan State College. The differences in varieties of oats and barley didn't seem to affect the alfalfa stands.

How about the rate of small grains sown? Wisconsin has a few years' research showing that 1 to 1½ bushels of oats per acre gave the best legume stands as well as good oats yields.

Band seeding. More farmers are trying this method of seeding because it's a surer way to get a stand. Small grains and fertilizer are banded together into the soil, and legume seeds are dropped right over the fertilizer band. New seedlings get a faster start with band seeding because they are seeded close to phosphorus, the element they most need soon after germination. Only about ⅔ as much alfalfa is needed with band seeding.

In Ohio, from 300 to 500 pounds of an analysis such as 0-20-20 or 0-20-10 have been used when band seeding. In a United States Department of Agriculture experiment, 750 pounds of 3-12-6 per acre gave good results.

Spring seeding will usually result in a good alfalfa stand. But if you have light, drouthy soils, say Michigan State College crops men, it will pay you to delay seeding till late summer. **END**

Do you have a question?

Through our Farm and Home Service Bureau, *Successful Farming* offers you personal-letter help with your problems without charge. Please outline all details of your question clearly when you write. If referring to an article in the magazine, mention page number and month of issue.

Address your inquiry to The Farm and Home Service Bureau, *Successful Farming*, Des Moines 3, Iowa.

How Ferguson adjusts weight to save on light jobs

The revolutionary Ferguson System transforms tractor and implement into a *single* power-farming *unit.*

It does this through the Ferguson-invented, three-point, sixty-second implement attachment, and a unique system of tractor-mounted implements with hydraulic draft control.

Which means that when you plow or do other *heavy* tillage work, the Ferguson System adds the soil's weight to the tractor-implement weight—through the hydraulic system. This automatically gives you *extra* traction weight when you need it . . . lets you pull three bottoms in most soils easily and smoothly!

But most important: On light work . . . the day-in, day-out jobs you do *most* of the time . . . your Ferguson isn't forced to haul excess, built-in weight that drinks your gas and oil. This is not true when you do light jobs with an *oversized* tractor.

Thus, Ferguson gives you big-tractor capacity, but does *not* give you big-tractor fuel bills on light work!

Are you interested in improving your income? Then we want to show you how the low-cost Ferguson "30" can do more of your jobs, more of the time, at less cost than other tractors. Read the offer below and take advantage of it today!

Get your sample of Ferguson System farming: Print your name and address in the margin of this ad and mail to: *Ferguson*, Racine, Wisconsin. We'll have an expert come to your farm and give you a generous sample of the Ferguson "30" doing your jobs at a saving. Write today!

YOU'LL SEE MORE AND MORE OF THE

Ferguson "30"

SEE YOUR FERGUSON DEALER FIRST

THE STARLINE
1995 PORTABLE BARN CLEANER
Cleans 3 Cows per Minute!

AS EASY TO INSTALL AS TO OPERATE

No Cross Gutters, Pits, Motor Mounts or Elevator Piers required. Easy installation of overhead conveyor track and simple concrete work for each gutter end (an inexpensive concrete kit provided for each gutter).

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For half the price of most barn cleaners you can have a high-quality, long-lasting, labor-saving cleaner that will clean a 30-cow barn in 10 minutes.

Easily stored out of the weather in the winter and taken down in the summer. The newest way . . . the best way to clean your barn.

Write Starline, Inc., Dept. 810, Harvard, Ill., for Free Booklet on Barn Cleaners.

STARLINE, INC., HARVARD, ILLINOIS ALBANY, NEW YORK

KILL RATS WITH
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WISCONSIN ALUMNI RESEARCH FOUNDATION

Now! Amazing New Way to keep your silage fresh, green, sweet-smelling!

Now, General Chemical, 50-year leader in agricultural chemicals, brings you another great new farm aid. This time it's STA-FRESH—the handy, low-cost sodium bisulfite powder that keeps silage fresh, green and sweet-smelling.

STA-FRESH insures a superior feed with less work at lower cost. It is already highly recommended by many county agents and agricultural leaders. STA-FRESH has been used with success on alfalfa, orchard grass, brome grass, ladino, sweet clover, timothy, vetch, oats, other forage crops, also corn.

Cows prefer STA-FRESH-treated silage. In a typical free-choice test, cattle ate an average of 63 pounds of bisulfite-treated silage to 18 pounds of untreated silage.

STA-FRESH keeps silage sweet-smelling, too; rids it of that "silage stink" that fouls your clothes, smells up the barn, and may taint milk.

Get the facts on STA-FRESH right away. Your Orchard Brand dealer has it in 100-lb. bags—and complete details on how to use it. See him today.

STA-FRESH*
Silage Grade
Sodium Bisulfite
*General Chemical Trade-Mark

ORCHARD BRAND SPRAYS • DUSTS

GENERAL CHEMICAL DIVISION
Allied Chemical & Dye Corporation
40 Rector Street, New York 6, N. Y.

Serving Agriculture Everywhere

Use fertility to beat a drouth

From page 59

On an unfertilized soil, about 95 percent of the nitrogen and over 50 percent of the phosphorus comes from organic matter released by bacteria. Even if manure or legumes are plowed under *in dry soil, bacteria "hibernate."* However, if nitrogen and other essential nutrients in available form are plowed under, *they may be absorbed by plant roots at a low moisture level.*

Too, there is evidence that a vigorous, deep-rooted plant may absorb moisture from the less-fertile subsoil, move the water through the roots to the drier, high-fertility topsoil, and absorb the available nutrients.

This also applies to other crops in dry seasons. Western Kansas experiments have shown the use of legumes and manures have regularly reduced yields of winter wheat. On the other hand, applications of soluble nitrogen fertilizers frequently give spectacular increases in yield.

Soybeans make their growth in midsummer, when the surface soil is often dry. Starter fertilizer applications have been disappointing on beans. Plant-food additions that boost the general fertility level—which in turn improves deep rooting—has been most helpful in increasing soybean yields.

Part of the benefits reported from supplemental irrigation of corn in the Midwest undoubtedly result from the stimulation of organic matter breakdown. The proper application of soluble fertilizer nutrients can give the same increase in yields as obtained by adding water.

Your corn populations may need adjustment. Heavier rates of fertilizer use have required thicker rates of planting to use the additional fertility. Although a high-fertility level will support thicker planting, populations of 11,000 to 13,000 plants (1 bushel to 5-6 acres) appear to be most practical. This is enough plants to utilize added fertility and give a yield of 100 bushels per acre in an average summer. Yields of 50 to 70 bushels can be expected in adverse seasons.

If you plant fewer stalks, you can't expect the highest yields in good seasons. Thicker planting may give you spectacular yields when conditions are ideal, but will have lower yields when moisture is short.

Naturally, there can be situations where fertilizers cannot help insure high yields. There may be conditions where soil moisture is so low that germination is hindered, or the plant wilts permanently. Neither can soil treatments overcome lack of moisture where roots "hit bottom" on impervious subsoils.

Therefore, to insure corn yields in a dry season, add enough fertilizer nutrients to develop vigorous plants that can fully utilize subsoil moisture, and use water-conserving practices to build up your soil moisture. **END**

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GENERAL ELECTRIC

FarmNews

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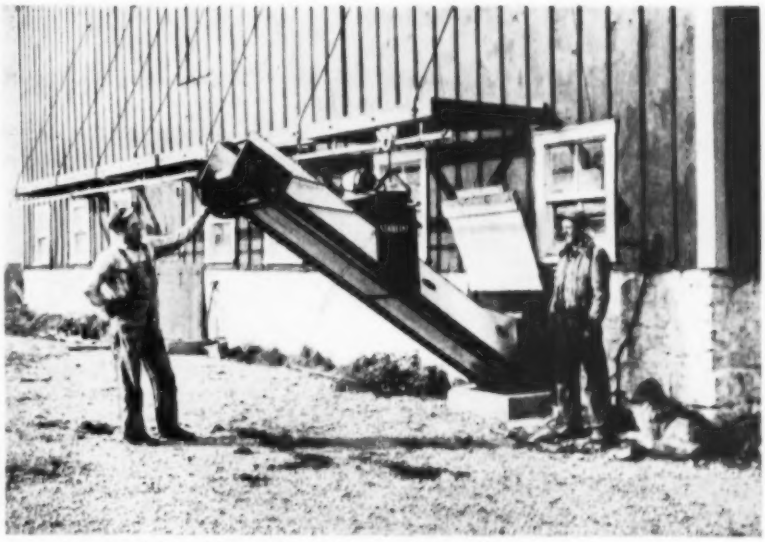
BARN CLEANER CUTS 75% FROM CLEANING TIME

ELECTRIC MILKER RUNS 8 MACHINES AT A TIME

Wallace B. Johnson's easy-to-operate milker needs little lubrication.

Wisconsin farmer saves valuable hours with versatile, portable barn cleaner



J. Harvey (left) and hired man, R. Meier are shown with work-saving barn cleaner.

Successful dairy farmer Wallace B. Johnson, owner of Quiet Valley Farms, Oneida, N. Y., gets exceptionally fine service from his electric milking machine. Mr. Johnson milks his outstanding herd of 67 Holsteins in 1½ hours.

Equipped with a G-E motor, this milker operates perfectly under extreme climatic conditions. Check "Milker" on coupon below for further information.

"If I had to do without my electric barn cleaner, I would quit milking", says Mr. Jerome W. Harvey of Rt. 2, DeForest, Wisconsin. "It used to take two of us an hour to clean the stalls: now we do it in 15 minutes and can get at the other chores." All manure, liquid and solid, is discharged directly into the spreader and there is no more manual lifting. Mr. Harvey has also found that milk inspectors approve of barn cleaners, which in turn has made it easier for him to pass their inspection.

To assure dependable operation the-year-around these cleaners are equipped with G-E Tri-Clad* motors. For more information please check "Barn Cleaner" on the coupon below.

*Registered trademark of General Electric Co.

POULTRY FEEDER CUTS WORK, BOOSTS PROFITS

The Hamre Brothers, Earl V. and Robert A., of DeForest, Wisconsin, who raise 40,000 broilers a year, have this to say regarding their automatic poultry feeder: "We have cut the growing period of our birds by 10% and use 9% less feed due to reduced feed waste. And the time saved has enabled us to eliminate the use of one hired man previously found necessary."

Automatic feeding in laying hens has increased production as much as 30% due to heavier eating.

Power for this profitable device is supplied by a dependable G-E motor. Check "Poultry Feeder" in coupon at right for detailed information.

Robert Hamre (left) and Earl Hamre with a flock of their automatically fed White Rocks.

General Electric Company
Section 671-33E, Schenectady 5, N. Y.

I would like additional information on the following:

- ☐ Barn Cleaner
- ☐ Poultry Feeder
- ☐ Milker
- ☐ How to Choose Your Motor

NAME _____

ADDRESS _____

CITY _____ STATE _____

YOU CAN GET

QUICK RELIEF

from tired eyes

Two drops of Murine in each eye seems to bathe and soothe away that tired feeling in seconds. Gently as a tear, Murine washes the delicate tissues, leaves them feeling delightfully refreshed. Murine makes your eyes feel good!

MURINE

-for your eyes

Important for MOTHERS-TO-BE

Millions of expectant mothers consider time-tested Mother's Friend an important aid to comfort and ease during pregnancy. Simply rub or gently massage Mother's Friend onto the abdomen—helps relieve the pain and discomfort of tight, dry, stretched skin. Mother's Friend can also aid in keeping skin smooth and supple after baby comes. Relieves aching back and leg muscles, too.

For Expectant Mothers

COMMENDED PARENTS

MOTHER'S FRIEND

Available at drug counters everywhere

Help for Home Planners. For help with your home planning, furnishing and decorating problems, visit one of the stores cooperating with Successful Farming's home planning service. You'll find a store near you listed on page 145.

PREVENTS RUST!

3-IN-ONE, unlike most ordinary oils, actually prevents rust. No wonder 3-IN-ONE outsells all other home lubricants!

"3-IN-ONE" OIL

Here's how to Take out those ink spots

Has a stubborn ink stain marred a good dress or your favorite chair? Then follow our step-by-step instructions and see them disappear

Cotton, linen, rayon, nylon, Vinyon, Orlon

Washable ink stains: 1. cold water; 2. soapsuds; 3. glycerin or ethylene glycol (if spot remains); 4. rinse in cold water.

Permanent ink stains: 1. cold water; 2. lemon juice or 5-percent solution of citric acid; 3. warm soapsuds; 4. glycerin or ethylene glycol (if spot still remains); 5. rinse in cold water.

Note: For persistent stains in *white material only*, use hydrogen peroxide (3-percent solution) plus household ammonia, *or* sodium hypochlorite (3-percent solution) followed by sodium bisulphite (3-percent solution).

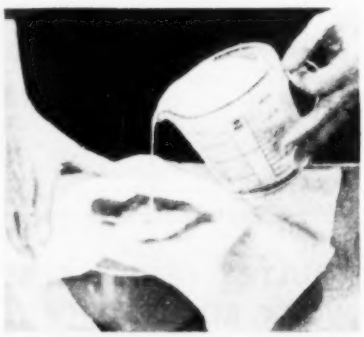
Wool, mohair, alpaca, silk

Washable ink stains: 1. cold water; 2. detergent; 3. glycerin or ethylene glycol (if spot still remains); 4. rinse in cold water.

Permanent ink stains: 1. cold water; 2. lemon juice or 5-percent solution of citric acid; 3. detergent; 4. glycerin or ethylene glycol (if spot still remains); 5. rinse in cold water.

Note: For persistent stains in white material only (since the following acts as a bleach), use a saturated solution of sodium hydrosulphite, or a 3-percent solution of hydrogen peroxide combined with household ammonia.

First step is to rinse ink spot in cold water to remove excess ink. Also rinse after each treatment to remove chemicals



Pour soapsuds or a detergent slowly through ink spot to hasten job. Dissolved ink is flushed through fabric into a bowl

For stubborn stains pour small amount of warm glycerin on material put over bowl. Rub through slowly with glass rod or spoon. Soak fabric in cold water afterward

Lemon juice or weak citric-acid solution dissolves iron compound formed by most permanent inks when dry. Absorbent pad under the spot absorbs dissolved ink. END

High fashion furniture! Thrifty low price! Long wear and easy care!

It's Daystrom's *new* black dining group—steel-strong for long wear, light in weight for easy care. Cheerfully at home in kitchen, dining or living room—even the patio! Foam-cushioned chairs have contour-curved backs for easy comfort. Table is trimly topped in rich wood-grain Daystromite® that shrugs off scratches, stains, heat!

See this and other easy-to-live-with Daystrom dining groups at better stores everywhere. All decorator-designed for every purse and home, in black, golden bronze or chrome finishes. In many handsome styles from drop-leaf tables for tiny rooms to big family tables that seat twelve.

Table shown (top 35" x 62", including one 12" leaf), wood-grain and other decorator patterns in yellow, grey, chartreuse, limed oak, black, white. Chairs in yellow, flamingo, white, pink, blue, chartreuse, red, green, grey. All tables and chairs completely washable. (Serving cart also by Daystrom.)

Look for the Daystrom arrow and be sure

"it's DAYSTROM furniture!" ®

DAYSTROM FURNITURE, OLEAN, N. Y.

DAYSTROM

THE LADY'S *FREEZING!* She's quick-freezing food in the special super-cold compartment of the new Admiral Dual-Freeze Home Freezer.

QUICK-FREEZE QUICK!

Now you can sharp-freeze your fresh foods first—and fast—without changing the steady, efficient freezer-cold in the rest of the cabinet. Built right into Admiral's DUAL-FREEZE home freezers there's a separate section just for that. Here it's much colder than the rest of the cabinet. Holds a lot, too—over 77 pounds of food. Works fast to catch foods at their best, make them ready for regular freezer storage.

It's just one fine advantage of Admiral's new DUAL-FREEZE home freezers. See the complete line of Admiral Freezers at your Admiral dealer's now.

THREE UPRIGHT MODELS
THREE CHEST-TYPE MODELS

Admiral

HOME FREEZERS

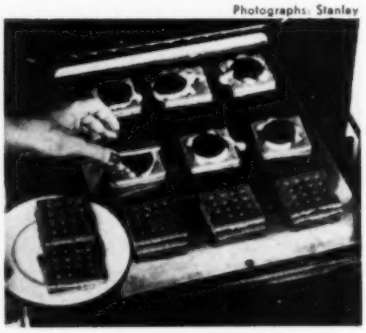
TIPS

Ideas that add sparkle to meals —make food preparation easier

Here's a quick, new way to make apple pie. Combine a No. 2 can ($2\frac{1}{2}$ cups) thick applesauce, 1 teaspoon lemon juice, 2 tablespoons sugar, $\frac{1}{4}$ teaspoon nutmeg. Chill. Pour into a baked 8-inch pie shell. Top with whipped cream and serve.—*Mrs. Will Schott, Iowa.*

Semisweet chocolate pieces added to old-fashioned bread pudding make a delightful and inexpensive dessert. Combine $\frac{1}{4}$ cup semisweet chocolate pieces and 2 cups soft bread cubes in a greased $1\frac{1}{2}$-quart casserole. Combine 3 beaten eggs, $\frac{1}{2}$ cup sugar, $\frac{1}{4}$ teaspoon salt, $1\frac{1}{2}$ cups milk, and $\frac{1}{2}$ teaspoon vanilla. Set casserole in a pan of hot water. Bake at 350° (moderate) about 1 hour.—*Mrs. Howard Langley, Illinois.*

Photographs: Stanley



When out of cookies and you need some in a hurry, here's a good trick to try: Place chocolate-covered mint patties on graham crackers arranged on a cooky sheet. Place in a 350° (moderate) oven for a few minutes until patties are melted. Quickly press more graham crackers over the melted patties and serve. They're extra good with a glass of milk.—*Mrs. Dean Brossman, Connecticut.*

for the cook

After grinding cheese, run several cracker crumbs through the food chopper. They will pick up cheese otherwise wasted and give you cheese-flavored crumbs for casserole toppings.—*Mrs. Ernest Miller, Michigan.*

To give fried potatoes an out-of-the-ordinary flavor, try adding a small amount of celery seed.—*Mrs. Mary Jean Arrington, Tennessee.*

Cheese crackers are a good way to add interest to hamburgers. Combine 1 pound ground beef, ⅔ cup cheese-cracker crumbs, 1 teaspoon salt, and a dash of pepper. Shape into 6 patties. Fry or broil until done.—*Blanche Campbell, Nevada.*

When you freeze refrigerator-cooky dough, tape a label on the roll stating the baking temperature and time. It saves getting out the cook book again to check. —*Mrs. Fred Hay, Ohio.*

This is something the youngsters will enjoy on Easter. Put 2 scoops of vanilla ice cream in a cone. Stand Jordan almonds upright near top of ice cream to make ears; add chocolate pieces for eyes, cinnamon candies for nose and mouth. Stand upright in glasses to serve.—*Mrs. Will Schott, Iowa.*

What to have for dessert? Here's a good one you can prepare in a hurry. Roll drained, canned peach halves in graham-cracker crumbs until well coated. Chill. At serving time, top with whipped cream. It's an especially good dessert for the "small fry."—*Mrs. Wendell Caskey, Iowa.*

Here's a dressy garnish for your meat platter. Drain canned peach halves. Combine a small jar of currant jelly and juice of 1 lemon with 3 tablespoons melted butter. Stir over low heat until jelly is dissolved. Add peaches and simmer until glazed. Drain and serve.—*Mrs. Nevill Streuter, Illinois.*

NOW! Your favorite Dry Yeast in a thrifty NEW 3-package strip

... it's the yeast that Prize-Winning Cooks prefer!

"This grand dry yeast is tops with me," says Mrs. L. A. Clark, a top cook at Illinois fairs. "So fast-rising and easy to use. And now I save money by buying it in the new 'Thrifty Three' package. Thriftier and handier, too!"

"When you bake at home, use Fleischmann's dependable dry yeast," says Mrs. James Conroy, prize-winning cook of Mason City, Iowa. "It keeps for months on your shelf—and it's so easy to store in this new 3-package strip."

Bring Pasture *to* the Cows

. . . a green banquet the year 'round

Wide interest has arisen in a new system of "mechanized grazing." Legume or grass pasture is field-chopped and brought *to* the cattle. It can be fed either fresh-cut daily, or ensiled for year 'round feeding.

Herd owners who have tried it say pasture produces more tonnage when harvested at the right time, by machine. There is neither hoof damage nor over-grazing. Cattle are kept quiet; no longer have to hunt for feed. More energy goes into milk or meat.

Your own Allis-Chalmers Forage Harvester equips you for this and other new money-making methods of livestock feeding. You can field-cut crops when they are exactly right . . . blossom perfect!

New Easy-Mount attachments readily interchange for almost any forage crop.

Be ready when crops reach their peak. Field-cut them fast . . . Allis-Chalmers style!

NEW! Easy-Mount

3-WAY ATTACHMENTS

ALLIS-CHALMERS
TRACTOR DIVISION · MILWAUKEE 1, U.S.A.

FORAGE HARVESTER

New "SLIDE-LOCK" mounting principle permits easy interchange of grass and row-crop attachments. Windrow pickup attaches and detaches in minutes.

Power-sharpen the wide, spiral-cupped cylinder knives without removing from the machine.

Save hours of labor the Allis-Chalmers way — field-cut grass, corn or sorghum silage; chop hay; clip pastures; chop stalks or straw.

Soils and crops

Should you use nitrogen on small grains?

Nitrogen is deficient for maximum yields on most fields. Even in Wisconsin where 4 out of every 10 acres are devoted to legumes, nitrogen is a big yield-limiting factor.

In a survey of 296 oats plots in Wisconsin last year, 100 pounds of nitrogen per acre averaged $7.05 net profit per acre over the cost of nitrogen. These plots had phosphorous and potash fertilizer also. Where no phosphate and potash were applied, the nitrate increased yields 18.5 bushels. Figuring $4.40 for the nitrogen and 80 cents per bushel for oats, this was a $10.40 profit.

Here are important points to consider before nitrating grain.

1. There is less danger of lodging when we apply nitrogen, now that we have stiffer-strawed varieties like Clinton, Bonda, Shelby, Branch, Sauk, and so on.

2. Lime and other fertilizer makes seedings more vigorous and able to tolerate the extra competition of nitrated oats.

3. Plots in Wisconsin receiving nitrogen made *1,157 pounds more straw per acre.*

4. Nitrogen fertilizer can be used with greater safety where deep-rooted alfalfa is being seeded, than where medium red or more shallow-rooted types of legumes or grasses are being seeded.

5. Nitrogen applied to small grain stimulates brome, or other grasses seeded. It also helps along the *early* development of the legume seedlings.

6. On sandy soils where you seed in oats, use about half as much nitrogen. On sand, it is also desirable to cut down the rate of seeding of the nurse crop, thus reducing competition for moisture and light.

7. Where oats is grown strictly for grain and where no seedings are made, we can safely use more nitrogen. The limit then is the lodging factor of the grain.

8. It's true that there will usually be higher yields of alfalfa, brome, or clover hay a year later where phosphorous and potash, *but no nitrogen* has been applied to the nurse crop. Where you nitrate, more of the minerals are used up by the grain, and there is less plant food left as a carry-over for the hay crop. You still come out ahead, though, and you can always top-dress the hay with phosphorus and potash.

9. Use any form of nitrogen. Apply at the time specified for the particular type of nitrogen. Some must be applied at planting, others can wait till after.

10. We have found that applications of actual nitrogen ranging from 25 to 35 pounds per acre is within economic and safe limits with prices for grain at present levels.

11. If you know your level of nitrogen is high from heavy manure, legumes, or nitrogen fertilizer *since* corn, don't use nitrogen on small grains.—*C. J. Chapman, University of Wisconsin.*

• • • •

Corn as stop-gap pasture

In Ohio experiments, Prof. D. S. Bell drilled corn so that plants were 6 inches apart each way. Sheep were turned in when the seeding was shoulder high and grazed it during the short pasture months of July and August.

According to Bell, a 2-acre field of drilled corn furnished pasture for 139 sheep for 6 weeks. The field got a plow-down application of 125 pounds of actual nitrogen per acre, plus the usual fertilizer at planting.

• • • •

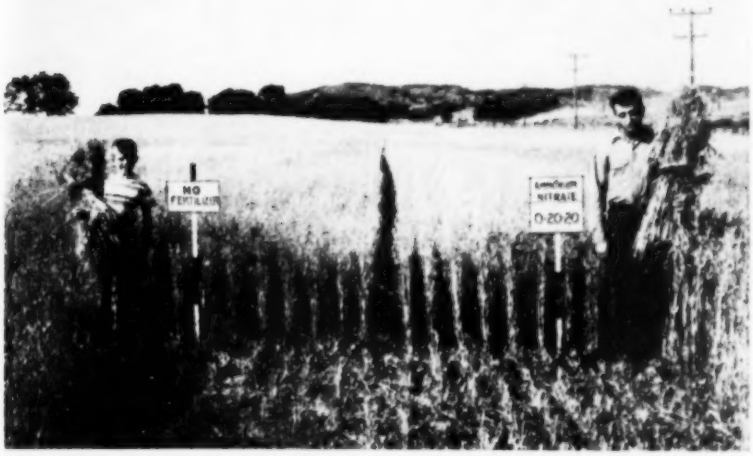
Sudan grass in old alfalfa

A practice popular with some California dairymen is to seed sudan grass in an old alfalfa stand.

After the first crop of hay has been taken off in the spring, the field is irrigated (probably not necessary if tried in the

[*Turn to page 92*

Photograph: Chapman



Alfred Schadler, Dane County, Wisconsin, grew 29 more bushels of oats where 66 pounds of nitrogen were applied with 0-20-20. No fertilizer (left) yielded 51 bushels

CONSTIPATED?

"I've found the right answer!"

says Harold Lape of Richmondville, N. Y.

"When I'd wake up with that headachy, logy feeling due to constipation, I'd know I was in for it. Nothing I'd tried gave me the kind of relief I wanted.

"Then I heard folks talking about how gentle and speedy Sal Hepatica was—and found the right answer to my problem. Now when I need a laxative, I take Sal Hepatica and get just the relief I want!"

Yes, take sparkling Sal Hepatica before breakfast and feel fine again . . . usually within an hour. Or take it in the evening ½ hour before supper and feel fine again by bedtime! Sweetens sour stomach at the same time. Keep Sal Hepatica handy in your medicine chest.

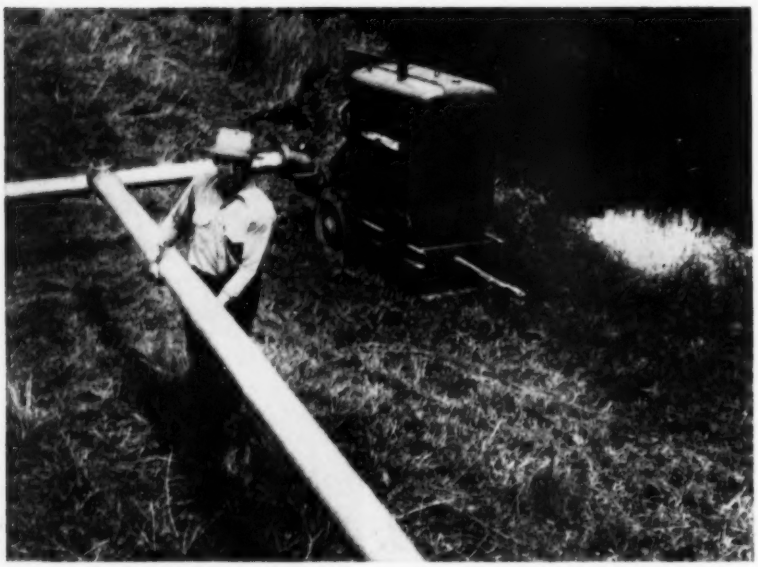
SAL HEPATICA®

ANTACID LAXATIVE

"Most any farmer will tell you"

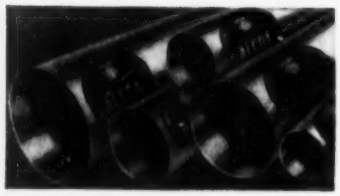
A PRODUCT OF BRISTOL-MYERS

SPRINKLER IRRIGATION OF PASTURES HELPS DAIRYMAN BEAT HIGH FEED COSTS



Sterling, Ohio — Smart pasture management through planned irrigation, fertilizing and seeding is Jim Gresser's answer to high feed costs. Since 1950, when he switched to an all-grass feeding program, milk production of his 30-cow herd has been climbing steadily. His last year's average of 380 pounds of butterfat proved Gresser's conviction that you don't have to feed high-priced grain if you take the steps to improve pasturage. Many of his cows were in their first and second lactations.

In discussing the success of his program, Jim gives sprinkler irrigation credit for a big assist. He emphasizes the fact that through his lightweight system, which he handles and sets up himself, he not only has protection against prolonged dry spells but can supplement normal rainfall as needed to assure highest growth potentials. A creek on Gresser's property gives him a dependable water supply for his system.



Tempered Aluminum Alloy Fits Alcoa Pipe for Rough Service

Although it weighs only one third as much as steel, Alcoa Aluminum Irrigation Pipe has plenty of strength to take rough treatment in the field. Made from one of Alcoa's most durable alloys, it is furnace-tempered for extra toughness, needs no paint or other protective coating.

Whatever your crop is,
Wherever your State,
To add to your profit,
Just irrigate.

Member of SPRINKLER IRRIGATION ASSOCIATION

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Address _____
City _____ State _____

Soils and crops

From page 91

Midwest), and worked up with a spring-tooth harrow. The sudan grass is seeded at the rate of 15 to 18 pounds per acre and harrowed in. The cuttings during the remainder of the summer consist of a mixture of alfalfa and sudan, especially good for silage or "green-lot" feeding.

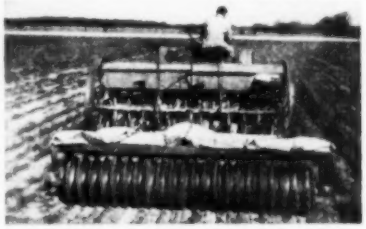
• • • •

Seeds lespedeza for pasture same year

His other seedings failed, but L. R. White, Elkhart, Indiana, successfully seeded and pastured 76 acres to lespedeza on sandy loam in the dry year of 1953.

White seeds all his small grain in 14-inch spacings by closing every other opening in his drill. The fertilizer is drilled every 7 inches. White says, "I get as much wheat, rye, and spelt in 14-inch spacings as I do in 7-inch, and I would not think of trying to get a grass seeding in 7-inch-spaced small grain. Competition for moisture is too great on sandy loam soil."

Photograph: Ackerson



He is shown above band-seeding 15 pounds per acre of the Iowa 6 variety of lespedeza in spelt last spring. He applied 300 pounds of 3-12-12 per acre.

After the grain was taken off, White pastured 35 head of crossbred Brown Swiss-Angus steers and heifers from August 1 until December 1 on the lespedeza.

Saponins—one cause of bloat

Saponins (plant materials that produce a soapy lather) or associated substances in alfalfa are one cause of bloat in cattle and other ruminants.

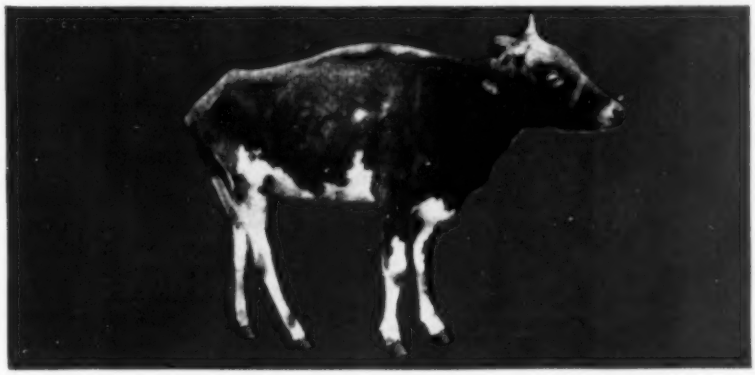
Scientists in the United States Department of Agriculture say this helps to explain the steady increase of bloat in recent years, as there has been an increased use of legumes in pasture mixtures.

In tests at the Beltsville agricultural research center, workers fed alfalfa saponin to 5 yearling ewes, 2 goats, and 1 heifer. In 8 out of 10 tests, saponin caused definite distention (stretching) of the rumen.

Proof that alfalfa saponin can cause bloat is the first big lead in the all-out effort by government and industry to learn how to prevent this ailment.

One look tells you this cow needs a daily ration of

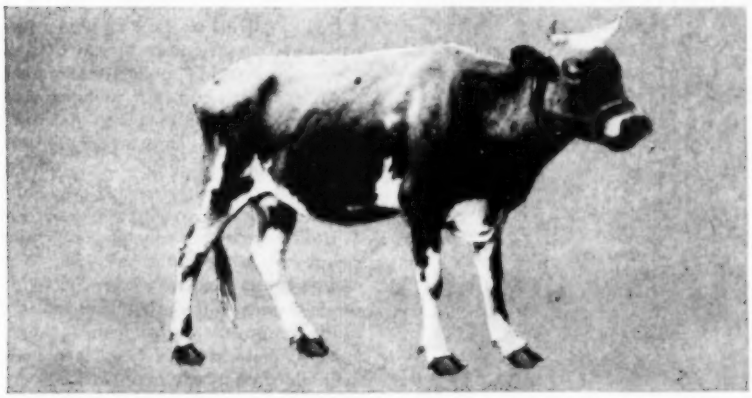
MORTON Trace Mineralized SALT



This salt-starved, minerals-hungry cow is actually sick. Her whole system is out of tune because of a salt and minerals deficiency. She is unable to make use of the essential nutrients she gets in her feed. She needs Morton Trace Mineralized Salt to restore her to good health. Only then can she drop healthy calves and attain profitable milk production.

This cow looks normal, but to be profitable, she too needs

MORTON Trace Mineralized SALT



This cow may look healthy, but her milk production is not what it should be. She may be an irregular breeder. The calves she does drop may be weak. An invisible need for salt and trace minerals is the cause of her trouble. She isn't getting enough Morton Trace Mineralized Salt. Free-choice feeding of Morton T-M Salt would pay off in healthier calves . . . higher milk production . . . more profit for her owner.

To maintain peak calf and milk production, even this cow needs

MORTON Trace Mineralized SALT

Yes—for maximum profits, all your cows need plenty of Morton Trace Mineralized Salt. Feed it free choice—regardless of the other feeds you use. The easiest, most economical way to insure an adequate supply of essential trace minerals, as well as salt, is to let animals satisfy their own instinctive hunger for Morton's Trace Mineralized Salt. You know they need it. They know how much.

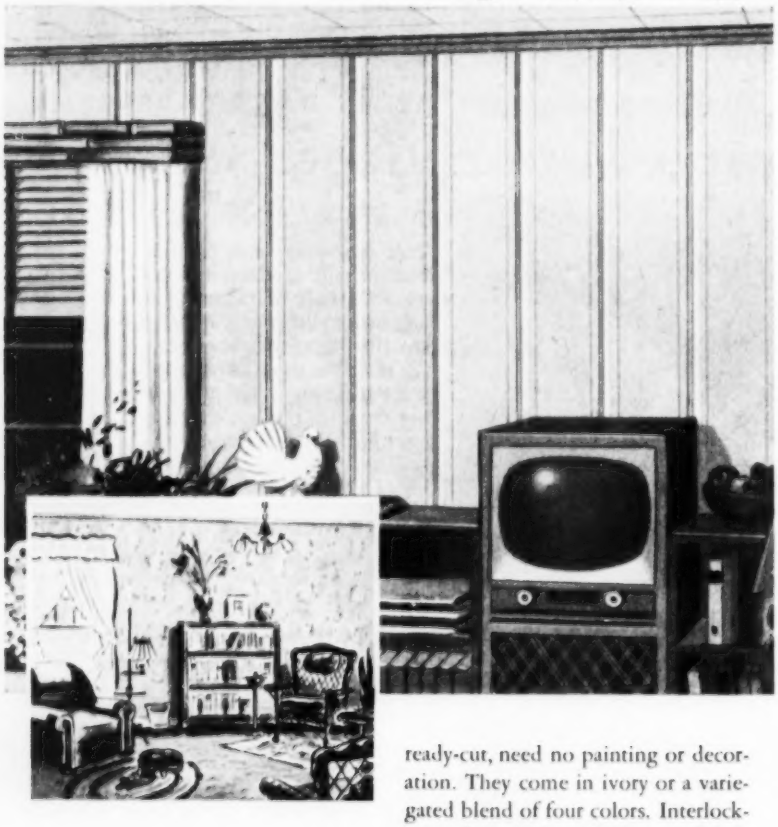
Trace minerals are thrift minerals

because they help make more meat, more milk, more wool per feed dollar

Iodine
Cobalt
Manganese
Iron
Copper
Zinc

GET MORTON T-M SALT AT YOUR FEED DEALER . . . MADE BY THE MAKERS OF FAMOUS MORTON TABLE SALT

Beautify your rooms with these colorful Gold Bond Insulation Planks



TAKE a drab, chilly old room... get some low-cost, easy-to-handle Gold Bond Insulation Planks... and before you know it, you've got the best-looking, most comfortable room in the house! And it's an *easy* job. Gold Bond Insulation Planks are ready-cut, need no painting or decoration. They come in ivory or a variegated blend of four colors. Interlocking edges hide nails or staples—whichever are used for application. Insulation is built-in to keep heat *in* during winter, keep it *out* in summer.

And use Gold Bond Insulation Tile for a handsome, sound-absorbing ceiling. See these fine remodeling materials today at your Gold Bond dealer's.

REMODEL NOW with Gold Bond INSULATION BOARD

MAIL COUPON TODAY

NATIONAL GYPSUM CO., Dept. SF-44, Buffalo 2, N. Y.

Please send me, absolutely free, folder, "Four Ways to Give Your Home New Beauty."

NAME .....

ADDRESS .....

CITY ..... ZONE .... COUNTY ..... STATE ...

High-powered laying ration

All-mash, high-energy rations, for laying hens are receiving more attention and endorsement lately. Here are the reasons for the increased interest:

1. Less labor is needed. An all-mash ration fits in especially well with an automatic feeding system, and the trend to larger pens and bulk-feed handling.

2. An all-mash system requires less skill on the part of the feeder than does a grain-and-mash system. The latter system requires some judgment in regulating the proportions of grain and mash intake at various seasons.

3. More eggs are laid and birds are heavier at the end of the laying period, than with low-energy rations.

Dr. F. W. Hill, professor of animal nutrition and poultry husbandry at Cornell University, says that "under usual market conditions, high-energy feed ingredients are cheaper per unit of energy than low-energy feed ingredients. Therefore, it will be cheaper per unit of meat or egg production to use high-energy, high-efficiency rations.

"Efficiency is markedly affected by the energy level of the mash," says Hill. "Not only is the production rate higher with the high-energy mash, but hens fed this ration consumed approximately 5 pounds less feed daily, per 100 hens, than hens maintained on a low-energy level.

The difference in feed intake and the opposing difference in egg production combined to make the high-energy level much more efficient in terms of the feed requirements per dozen eggs produced.

"*On the basis of feed costs the past year, the cost per dozen eggs was approximately 5 cents less on the high-energy ration than on the low.*"

Here is an example of a high-energy, all-mash layer ration used at Cornell University, Ithaca, New York.

Ingredient	*Pounds*
Yellow corn meal	945
Ground wheat	500
Alfalfa meal (17 percent)	40
Soybean meal (44 percent)	250
Fish meal	50
Meat scraps (50 percent)	50
Distillers' dried solubles	50
Dried whey	50
Dicalcium phosphate	25
Ground limestone	30
Salt	10
Manganese sulfate	0.5
Vitamin-A oil (4,500/gm)	1
Dry D (1,500/gm)	1

This ration figures out 16.1 percent protein. The calcium level is insufficient for high egg production, thus free-choice feeding of oystershell or other calcium supplement is necessary.

These week-old baby chicks lived

36 Hours at 10° Below Freezing

in a Philco home freezer
to demonstrate the

Margin of Safety

in Staley **CHICK ATOMS**

Think of it! Week-old baby chicks subjected for 8 days to rapidly changing temperatures . . . including a total of 36 hours at *10 degrees below freezing!* Snatched from 80-degree warmth and plunged into a freezer for one hour the first day . . . 2 hours the second . . . 3 hours . . . and finally 8 hours at a stretch!

Thanks to Staley's **MARGIN OF SAFETY,** not a single chick died . . . not a single chick showed any harmful effects!

This test was independently conducted by one of the midwest's best-known, non-profit scientific laboratories to prove the extra **MARGIN OF SAFETY** in each sack of Staley CHICK ATOMS!

Staley Milling Company
Kansas City 16, Mo.
East St. Louis, Ill.

No. 101-54

Staley's Margin of Safety Is Your Margin of Profit

Staley's Margin of Safety	Your Margin of Profit
Many Feeds Protect This Far	Many Feeders Just "Get By" with Average Feeds

Your chicks may never be exposed to such hardships—because, naturally, you'll follow the best possible management practices. But remember this: Any feed that keeps chicks alive and healthy at below freezing temperatures has the power to carry birds through almost any farm problem! Staley's **MARGIN OF SAFETY** is also *your* margin of profit . . . because every chick lost, stunted, or attacked by disease whittles away *your* poultry earnings. The chart at the left shows why.

Baby chicks desperately need 71 vitally important nutritional factors for fast growth and good health. Most starting feeds contain many of these factors. But CHICK ATOMS supplies all 71 . . . *plus a surplus of the most important* — the **MARGIN OF SAFETY** that protects your chicks. There's a careful, scientific balance of many amino acids . . . powerful antibiotics and vitamins to stimulate growth and retard disease. Megasul, too, to control coccidiosis—the disease that kills or cripples one out of every 5 chicks hatched.

See your Staley dealer today. Insist on the genuine CHICK ATOMS. No other feed provides Staley's **MARGIN OF SAFETY** . . . assures *your* margin of profit!

CHICK ATOMS

Staley's Margin of Safety Is Your Margin of Profit

Battle Tested Foot Protection!

NEW
INSULAIR BOOTS
FOR THE FARM

- **InsulAir**...the new plastic material made up of millions of individual air cells for perfect insulation.
- **InsulAir**...proven in Korea...cut frost bite to a minimum. InsulAir stays at normal body temperature at freezing outside temperatures.
- **InsulAir** protective footwear is rugged, lightweight. Gives you the *full value* and *extra wear* you need for real farm economy.

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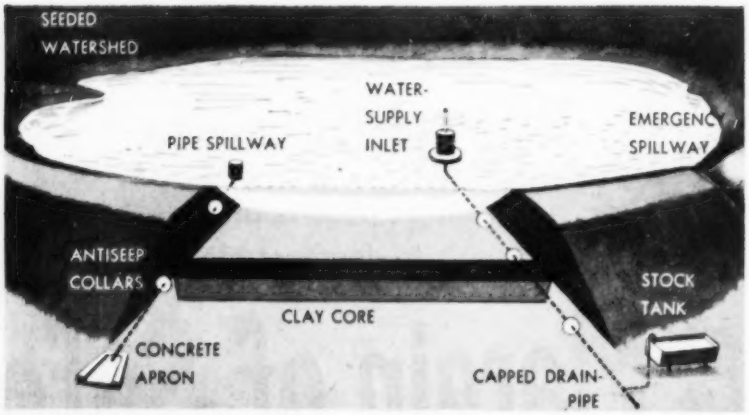
MASCOT-4-WHEEL TRACTOR
AMERICA'S LOWEST PRICED TRACTOR
POWERFUL • RUGGED • DEPENDABLE •

ONLY $225

Powerful 3 H.P. Engine • Heavy Duty Traction Tires • Forward & Reverse Speeds • Low, Low Operating Cost • Ideal For Farm or Estate

NATIONAL'S MASCOT is powered by heavy duty Clinton 3 H.P. 4 Cycle air cooled engine. This Tractor is small in size but great in power and efficiency. MASCOT will tackle any job on the farm. All attachments available including Snow Plow, Sickle Mower, Gang Mowers, Trailer, Turning Plow, Disc Harrow, etc. *Send for Complete Information*

NATIONAL FARM EQUIPMENT CO., INC.
142 GREENE STREET • NEW YORK 12, N. Y.



Flat-bottomed ravine makes best site for pond if watershed is suitable. Don't select permanent stream. Build fill at narrowest point in ravine. Water-supply pipe is located in deepest part of pond. Mark location of the pipe with a pole, so swimmers and fishermen can tell where it is. The concrete rings serve as antiseep collars

How to Build a farm pond and get paid for it

By Bill Clothier

Your pond is bound to cost you something, but you can get reimbursed for a sizable chunk of the building costs.

Besides, a proper pond will supply water for your livestock, provide a place to swim during those summer scorchers, and furnish fish for your table.

Sound good? Here's how it works:

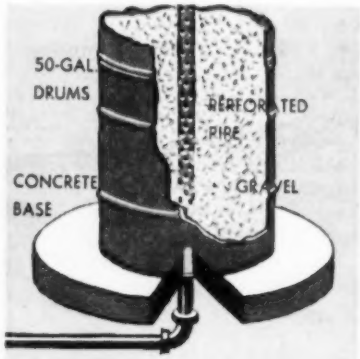
In many farm states, the Agricultural Stabilization and Conservation service (formerly Production and Marketing Administration) will help pay for construction costs if they approve of your farm-pond plans. That doesn't mean only one kind of pond can be built. But certain basic qualification must be met. You've got to build a farm pond—not a puddle. Rates vary from state to state, but in Kansas, payments have averaged from 50 to 70 percent of total construction costs.

The extension service in most states has plans for building farm ponds. So do the state conservation agencies, and the Fish and Wildlife Service. The plans vary in detail but are alike in principle.

Selecting the site. A small valley or ravine offers you a ready-made excavation, but you still must remove topsoil from the pond site. For most purposes, you need only an acre or two of surface water. If the area is so flat that your dam will back up 3 to 5 acres of water, better pick another site or call in an engineer.

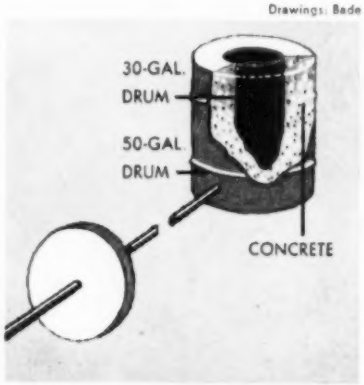
Test the soil to determine its composition. Sandy clay, or mixtures containing clay are best. Don't build a fill where there's lots of sand, gravel, shale, or limestone, because water will seep out. If you can't find the right kind of soil, the use of

[*Turn to page 98*



Water-supply inlet filters water for livestock, has ¼" holes in pipe. Pipe must be 2" in diameter for a 1- or a 2-acre pond

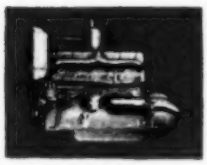
Drawings: Bade



Pipe-spillway inlet is 2' below bottom of emergency spillway. Pipe should be at least 6" in diameter, must be watertight

FIVE ANSWERS TO YOUR QUESTION:

What makes one tractor better than another?



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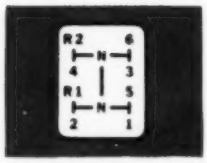
To get the most out of your fuel, you want a six cylinder, overhead-valve engine. That's how Oliver tractors are powered.



2. Wider Range of Speeds.

Only with *six* forward speeds can you choose from the full speed range, run on the least amount of fuel. That's what Oliver gives you . . . six speeds forward, two reverse.

3. Lower Operating Costs.

On some farms, a gasoline tractor will show the lowest costs; on others, a diesel. Only one company offers you *both* fuels in every power class that's Oliver.

4. Independent Power Take-Off.

You want an *independent* PTO . . . one that keeps running when you stop the tractor . . . one you can shift in or out when you're moving. You know who makes it: Oliver.

5. Easier Riding.

You spend more time on your tractor seat than in any chair in your house. That's why Oliver has made you the most comfortable seat on the farm—*standard equipment.*

Plenty more where these came from!

Important as they are, these are but a few of the better things you get when you choose Oliver. See them *all* before you buy—at your Oliver Dealer's.

See your **OLIVER DEALER** and SAVE!

The OLIVER Corporation
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Chicago 6, Illinois

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☐ I am a student.

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☐ Three-four plow "88"
☐ Two-three plow "77"
☐ Four-five plow "99"

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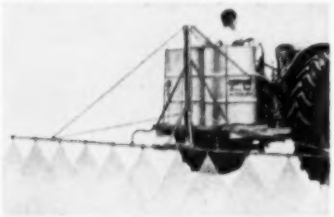

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Saves extra labor—does more work than 2 hired hands! Loads 75 bales in 15 minutes. Picks them up just as dropped, straightens them automatically. Saves baler, too - no strain or breakage pulling skids or wagons. Ground driven, light draft, easily hitched. Two models - bale deck heights 6'9" and 10'9".

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ORDER TODAY FROM YOUR DEALER. If he hasn't the genuine Golden Rod, send $6.98 — we'll ship direct, Ppd. Card brings free folder. GET YOURS NOW. $6.98

DUTTON-LAINSON CO., Mfg. Div. Dept. S, Hastings, Nebr.

Build a farm pond

From page 96

bentonite—a porous, moisture-absorbing clay—has whipped the problem. In cases of severe seepage, the use of a special paper and tar on the pond bottom has proved practical for small ponds.

Determining pond size. This depends largely on watershed. It won't be the same in all states (or within states), but the Fish and Wildlife Service recommends 10 to 15 acres of watershed for each surface acre of water when the area that drains is in pasture.

Plan on at least an acre of surface water. Depth of pond will vary from one region to another, but shoot for a depth somewhere between 8′ and 12′.

Building earth fill. Fill should be 8′ wide at top, with a 2:1 slope on the downstream side and a 3:1 slope on the upstream side. Top of fill should be about 4′ above level of water when pond is completed. Build the fill 10 to 15 percent higher than plans specify, to allow for settling.

Remove topsoil, then plow or disc the ground where the fill will be. This makes a bond between natural ground and fill material. Dig a 4′ trench where the fill will rest. This trench should extend about 1′ into underlying soil, and is filled with sandy clay, forming an impervious core for the fill. Pack it well.

Laying water-supply pipe. Lay pipe after filling the trench, but before starting main fill. Place it below frost line. Pipe should have an antiseep collar (concrete ring) every 20′. Build a concrete base for the intake filter.

Stock tank can be hooked to supply pipe with 1″ leadin. Install a shutoff valve where pipe leaves dam. Or, you can fix a float valve on the tank and automatically control your water supply. End of pipe extends beyond tank, and should be capped for easy drainage.

Planning spillways. You need two. A regular pipe spillway, and an emergency spillway. Pipe spillway should empty into a concrete apron to prevent erosion.

Bottom of emergency spillway should be 2′ higher than top of pipe spillway, and 2′ lower than top of fill. Make it 10′ wide, with flat bottom and sloping sides.

To meet requirements of A.S.C., the pond must be fenced to keep livestock out. Watershed, spillway, and earth fill must be seeded to permanent vegetation.

Be sure to check with your county agent, or state conservation agencies. They can tell you the specific requirements for your area. Sometimes you must get permission from the state before building. And to qualify for A.S.C. payments, your pond construction must be approved *before* it's built.

Triple-duty feeder . . .

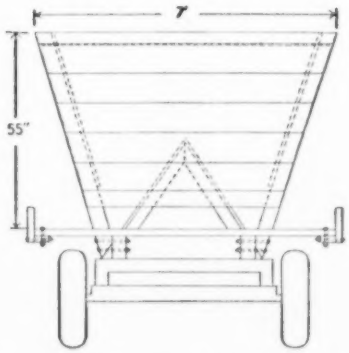
hay, silage, and grain

Here's a laborsaving feed bunk that could be used during winter or summer.

Paul Rolfsmier, Seward County, Nebraska, built 3 of these portable rigs. He uses 2 of them for silage or hay, puts grain in the other feeder.

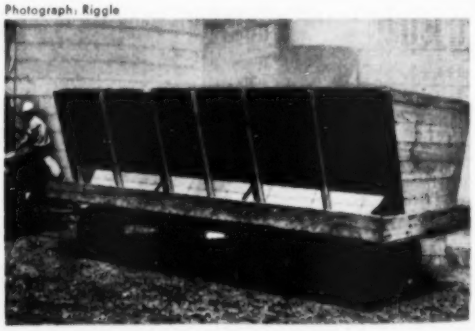
The trailers are taken to the silo for filling, then pulled into the feedlot.

The feeders are built on ordinary trailer running gears, and could be adapted for nearly any size of frame. The lip of the trough on Rolfsmier's feeder is slightly more than 3′ high.

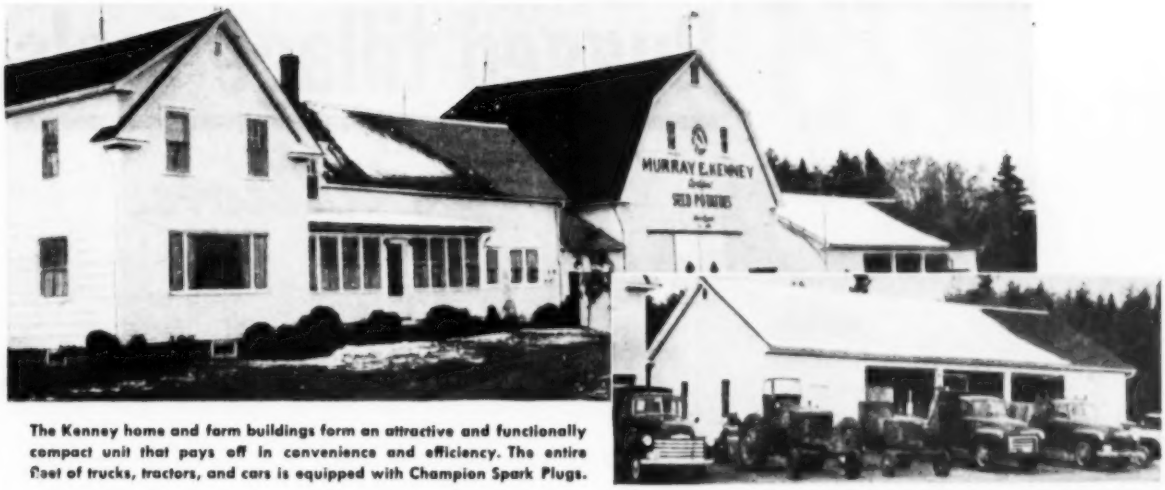


Framework of the feeder is made of 2x4 and 4x4 lumber. Frame is covered with shiplap, or by tongue-and-groove. Inverted V is 2′ high, keeps the feed moving into trough

Photograph: Riggle



◄ **Portable feeder** can be shifted around the feedlot to take advantage of windbreaks or dry places. Feeder is 18′ long, has 2x10 lumber around the edge of the feed trough



The Kenney home and farm buildings form an attractive and functionally compact unit that pays off in convenience and efficiency. The entire fleet of trucks, tractors, and cars is equipped with Champion Spark Plugs.

"Getting the spring soil ready for potatoes is our heaviest job but, believe me, Champions keep those tractors rolling."

—Says MURRAY E. KENNEY, Presque Isle, Maine

The Kenney's are a large and well-known family in Maine's famous potato country. Murray Kenney, his brothers and his father, are all potato growers, farming a total of around 1000 acres. Typical of the family operation is Murray's 300-acre farm with its modern home, excellent farm buildings and efficient equipment. The farm specializes in seed potatoes of the advanced varieties—Katahdins, Tetons and Cherokees.

Mr. and Mrs. Kenney, with a family of three boys and a girl, are very active in farm circles. The Young Farmers Association—farmers up to age 40—which Murray has served as President, meets regularly at different points in the area to discuss farm problems. These forums are usually lively ones with movies and guest moderators adding to the breadth of each discussion.

The snow comes early around Presque Isle and spring comes late. So, there is much to be done from May 1 through to October. With this condensed season comes great dependence on equipment that can keep going under heavy usage. But let Murray Kenney tell you.

"Up here it's less than six months from the time the ground thaws until the potato harvest must be finished. That means you can't lose any time through truck or tractor failure. For that reason, we particularly appreciate the extra performance and dependability we get from Champion Spark Plugs. We know now that Champions are the best for any engine on our farm."

CHAMPION SPARK PLUG COMPANY, TOLEDO 1, OHIO

YOU'LL SAVE MONEY BY STANDARDIZING ON

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CHAMPION

SPARK PLUGS

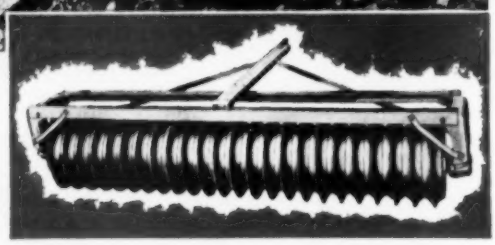
FOR EVERY TYPE OF FARM ENGINE!

Drive-in area of potato storage depot has overhead hoist to speed the transfer of potatoes from trucks to bins.

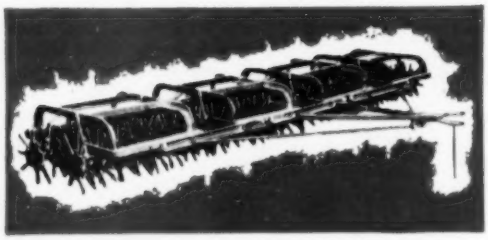
A reserve stock of dependable Champion Spark Plugs is always on hand in the well-equipped maintenance shop.

NOW! 3 Rugged tillage tools by Brillion

1 BRILLION PULVI-MULCHER — Actual photo shows field turned with disc plow, followed by just two trips with the Brillion Pulvi-Mulcher. No other tool can accomplish as much. Adjustable, heavy-duty spring-tooth section digs up lumps to be crushed by rear roller as it firms the seedbed. Full flexibility . . . thoroughly works uneven ground. Dust-sealed roller bearings . . . 3-way draw-bar pull . . . sturdy 2-inch axles. Comes in 5 sizes — 6-, 7-, 8-, 9- and 10-ft. widths.



2 BRILLION PULVERIZER—Does 5 jobs in one operation for a better seedbed . . . sturdier plant growth. Pulverizes the soil . . . crushes clods . . . packs . . . levels and mulches the seedbed. Large roller bearings in dust-proof housing — easy and inexpensive to replace. Complete flexibility over uneven ground. Wide variety of models and widths.



3 BRILLION ROTARY HOE — Exclusive Work-All wheels . . . large, cast iron hub, staggered teeth . . . extra clearance . . . complete flexibility. Contour-hugging sections connected at centers rather than the ends. Long-life bearings . . . sturdy drawbar . . . individual weight box on each section. 3-point hitch also available for 2 section model. Available in 2-, 3-, 4-, and 6-section units.

Cut down labor . . . step up yields!

Brillion Tillage Tools give you fast, thorough seedbed preparation for better yields and greater profits. They're years ahead in design . . . scientifically engineered to end crop losses from weak, stunted plants due to poorly firmed soil.

Brillion Pulvi-Mulchers and Brillion Pulverizer-Packers eliminate air pockets by thoroughly crushing lumps and pressing soil particles together. Tiny root hairs get plenty of nourishment as they work their way through the soil. Heavier supporting roots get a good, firm hold.

The Brillion Rotary Hoe lays a beautiful mulch on ground that is otherwise crusted and baked. It "kicks out" weeds without disturbing your grain crop.

Compare the construction of Brillion Tillage tools with any on the market! Axles, bearings, frames, hitches . . . all designed and built for today's tractor speeds, easy maneuvering, low-cost maintenance. They're built with expert care by the manufacturer of the world-famous Sure-Stand Grass Seeder that gets a better stand of grass at less cost.

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Brillion Iron Works, Inc., Dept. SG-1-4, Brillion, Wisconsin

Please send me complete information about the Brillion Line of Tillage Tools. I have about ..... acres in crops.

Name.....

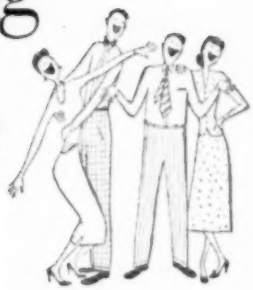
Town..... RFD.....

County..... State.....

Brillion TILLAGE TOOLS

★ *Made Stronger to Last Longer*

Laughing at Life



Room for One More

Immigration official: "Why do you want to enter the United States?"
Immigrant: "I want to lead a peaceful life and make an honest living."
Official: "O.K., then. I guess that's not one of the overcrowded occupations."

Why Wouldn't He Be?

Blue: "*Smithers' wife presented him with triplets this spring.*"
Brown: "*Yes, they say he's suffering with offspring fever.*"

Tragic Fate for Grandpa

For sale: 115 acres, good buildings, solid road. Owner 80 years old to be sold with growing crops.—*Baltimore (Maryland) Sun.*

Dirty Politics?

Full of enthusiasm, she had gone in for politics and was away from home most every day. One night she returned at 9 o'clock and sank into an armchair.

"*Everything's grand,*" *she exulted.* "*We're going to sweep the state.*"

Her husband looked around wearily and said: "*Why not start with the kitchen and living room?*"

True to Type, Sarge

It was a hot day, and the sergeant was having plenty of trouble with his squad of awkward rookies. At his wit's end, he called them to a halt and wiped his brow. "I'm darned if I know what to do with the pack of you," he growled.

"There's some big shady trees over there, Sergeant," said one young recruit hopefully.

"Yea, I know," replied the sarge, "but I haven't a rope."

How Often Does It Happen?

A successful man is one who earns more than his wife can spend. A successful woman is one who finds such a man.

Watch Those Scales, Gals

Hogs 4,500; fairly active; barrows and girls 200 lb. up, steady to 10c lower.—*St. Louis (Missouri) Post-Dispatch.*

Reassuring Words

The big bus was zooming around the sharp curves on a mountain road. A nervous old lady finally tapped the driver on the shoulder and pleaded: "*Don't go so fast around these curves. It scares me almost to death.*"

"*Now don't be afraid, Auntie,*" *consoled the driver.* "*Just do as I do. Shut your eyes when we come to a sharp curve in the road.*"

Which Man Is the Lucky One?

A little girl, after seeing her first church wedding, asked, "Mama, has the bride changed her mind?"

"No, dearie. Why do you ask?"

"She went up the aisle with one man and came back with another."

100 Percent Profit

An inexperienced suburban farmer bought a fine-looking cow at an auction. After taking her home, he found the cow refused to eat or drink.

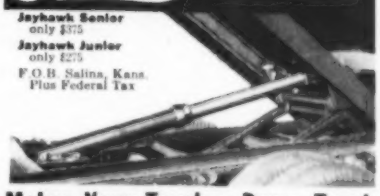
"*By golly, Martha,*" *he told his wife,* "*if the cow is a good milker, I sure got a bargain.*"

SUCCESSFUL FARMING

"Let him keep it—every boy should have a pet."

Two Great Harvest Hands That Make Grain Moving Easy

REVOLUTIONARY NEW Jayhawk Mobile Wedge TRUCK HOIST



Makes Your Truck a Dump Truck

Completely electric-hydraulic. No power take-off. Dual push button controls. Operates with automatic transmissions, manual 3 or 4 speed transmissions and on 6 or 12 volt electrical systems. Two models: 7-ton Jayhawk Senior for 1, 1½, 2-ton trucks with 9 to 14 foot bodies; 3-ton Jayhawk Junior for ½, ¾, 1-ton pickups with steel express or farm type bodies. Unequalled for simplicity, efficiency, easy mounting and low cost.

FAMOUS BAZOOKA SPIRAL GRAIN LOADER

Five different models: versatile FLEXO (flexible shaft) DRIVE machine (illustrated); low cost carrier and truck units with idler pulley drive; high elevation auger with scissors carrier and Flexo-drive; vertical unit for permanent installation.

Helicoid flighting, heavy gage lock joint tubing, high speed sealed bearings throughout. Sectional tube constuction in most models. No center bearings to obstruct grain flow.

Sold by Jayhawk and Bazooka Dealers. Write direct for FREE LITERATURE and price details.

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Decorating advice. Stores offering **Successful Farming's** home planning service are listed on page 145. Visit starred store nearest you for help with decorating problems.

FREE Roll Film

Send ad with 10c for mailing. Sizes 116, 120, 616, 620 only. Mention size; limit ONE roll. Offer good for 30 days.

FREE FILM CO.
St. Louis 14, Mo.

NEW FARM TOOL

Invented by a farmer, this tool is the answer to costly chain break delays. The CHAIN-GER will connect and disconnect *standard* steel sprocket chain easily—sizes 25 through 77—*without removing the chain.* The CHAIN-GER is as much a tool box item as a pair of pliers. See your dealer or write today.

$4.95

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4213 Grimes Ave. S., Minneapolis, Minn.

Blenn, Brimm & Pasturgro help you make...

MORE

PER ACRE - PER HOUR PER ANIMAL

Specially fortified growth elements in BLENN, BRIMM and PASTURGRO give your crop an extra boost . . . that brings back their cost, and more besides, in higher yields and better quality.

IT'S GOOD BUSINESS to feed your main crops BLENN and BRIMM, and your grass and legumes with PASTURGRO. Higher yields of grain and abundant forage assure you of top returns for each plant food dollar you invest. You can earn more per acre planted, more per hour worked, and more per animal fed, when you feed your main crops and pastures with Swift's specialized crop makers.

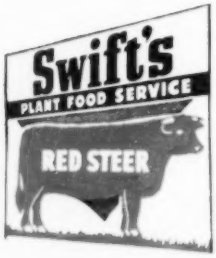
Chemically hitched growth elements

The chemically hitched growth elements in BLENN, BRIMM and PASTURGRO are exceptionally uniform because of an exclusive Swift method of making them. All ingredients are completely mixed mechanically and then completely processed chemically.

With manufacturing plants in major crop-growing sections, Swift formulates and fortifies BLENN, BRIMM and PASTURGRO to meet the exact needs of crops grown in your area. For certain crops and soils, BLENN, in the red plaid bag, is the ideal plant food. For other crops, and different soils, BRIMM, in the yellow plaid bag, does the top job. PASTURGRO, in the green plaid bag, is made especially for pastures.

Consult your Authorized Swift Agent or dealer. You can rely on his advice and . . . FOR THIS SPRING'S USE, BE SURE TO PLACE YOUR ORDER FOR BLENN, BRIMM AND PASTURGRO NOW.

Buy at the sign of the Red Steer



RED STEER ***comes in many analyses to meet the needs of your crops and soil. It is Swift's reliable plant food for general crops.***

Flexible supports

From page 47

agricultural production can be adjusted to changing demands as rapidly as possible. And though we would expect them to be generally inoperative, we would need authority to use acreage allotments and marketing quotas to meet emergencies for individual commodities. . . ."

He added, "We know further, that putting chief emphasis on maintaining *high unit* prices defeats our own ends. During hard times, even if we were able to keep prices up by cutting production, farmers would not get parity of income."

Later in the day, Farrington stated three principles which his committee recommended in regard to future price-support programs:

"First, a high degree of flexibility, *both* as to support levels and methods, is essential in view of differences between commodities and constantly changing conditions that cannot be foreseen.

"Second, mandatory loan and purchase operations probably should be limited generally to *storable* commodities. . . .

"Third, the *minimum* support level should be considerably *below the general level of prices* sought to be achieved over a period of years . . ."

The agricultural committees adjourned at 12:20 p.m., after asking Mr. Farrington some pretty sharp questions. At 2:15 p.m., the committees reconvened and the then secretary of agriculture, Clinton Anderson, endorsed the reports presented by his committees.

That afternoon he said:

"I feel I should once again call attention to the dangers involved in a rigid formula for price supports. We not only need to modernize the commodity relationships; we also need considerable administrative flexibility with respect to price-support operations.

"A flexible system based on the Agricultural Adjustment Act of 1938 . . . seems to me *far superior* to any rigid adherence to a fixed level."

Former Secretary Anderson—now a senator from New Mexico on the Senate Agriculture Committee, Senator George Aiken of Vermont, the American Farm Bureau Federation, Secretary of Agriculture Ezra Taft Benson, and many others believe these statements are just as true today as when they were originally made in October, 1947.

In fact, a formula for flexible price supports for the basic commodities, varying from 60 to 90 percent of parity depending on supplies, was included in the Agricultural Act of 1948. But this provision was modified before it was to go into operation in 1950. Then, before the *less-flexible* provisions of the Agricultural Act of 1949 were utilized in 1952, price supports on basic commodities were made *mandatory* at 90 percent of parity for another two years—ending with the 1954 crop.

J. L. Morton, president of the Minnesota Farm Bureau, effectively stated the

position of many of today's advocates of flexible price supports when he stated his views recently:

". . . let us face our problems as statesmen and not as politicians. Only an economic illiterate can believe that high fixed price supports can be made to work. The farm prices-and-supply situation calls for a higher level of statesmanship than merely saying 'Let the government buy everything and worry about what happens next.' This is no solution because, we ourselves, are the government.

"Farmers who have thought the thing through see the proper place for price supports. *The one and only function of supports is to serve as insurance against disaster*—the kind of disaster that came to us 20 years ago."

The advocates of flexible price supports put forth three major reasons why they are superior to fixed or rigid supports:

First, flexible price supports are needed as incentives to encourage *adjustments* in the production of *individual* commodities. With changing production practices and shifting market demands, it is only common sense to recognize that the prices of individual products such as cotton, corn, and wheat should not be maintained in the *same fixed* relation to *each other*, year after year.

Such fixed price ratios will result in *too much* wheat and cotton and *too little* feed grains and livestock products, or vice versa. In the past 50 years, prices of farm products have varied greatly from season to season in relation to each other—and it has been these varying prices which have guided farmers in expanding and cutting back on production of different crops. Flexible price supports are needed to permit this essential economic process to continue.

Second, flexible price supports are needed to meet changing demand situations. Consumers may, and do, change their preferences over the years for cotton, cereals, and livestock products. Fixed price supports do not take these changes into account and may result in pricing individual products "out of the market." Also, when supplies build up as a result of favorable weather, the only way to move them into consumption is to lower prices accordingly.

Flexible price supports are essential if supplies are to be moved into consumption and unmanageable surpluses avoided.

The *third* major reason advanced for flexible price supports is of a different character. If production and consumption (supply and demand) are not kept in balance by market prices and flexible price supports, they must be kept in balance by government controls. Rigid or fixed price supports can *only* work in conjunction with rigid government controls on production through the use of acreage allotments and marketing quotas.

Flexible price supports are needed to avoid putting agriculture in a strait jacket of fixed price supports and an ever-growing mesh of rigid production controls, say variable support advocates. **END**

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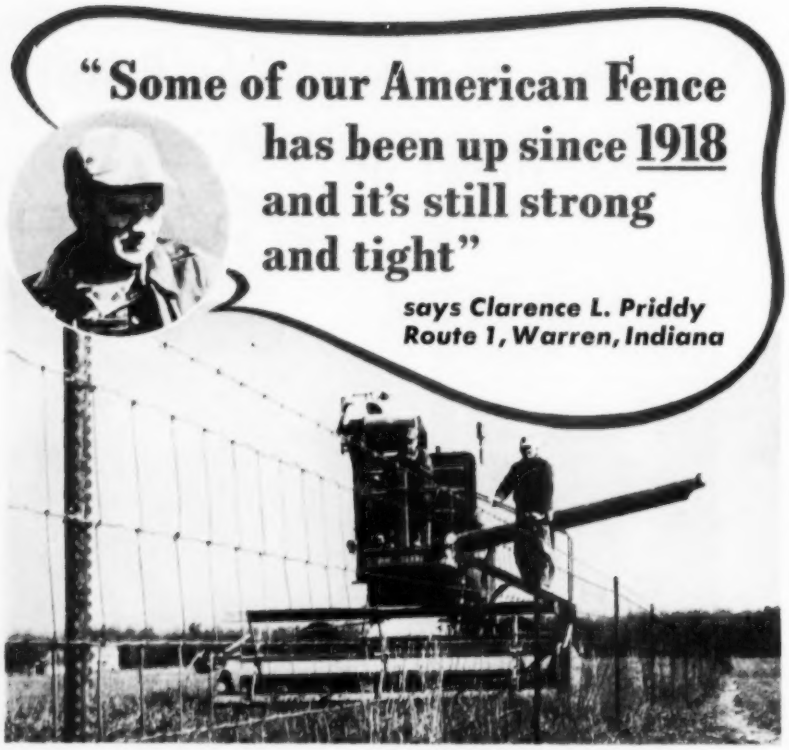

Thirty-five years is a long time for *any* type of fence to stand solidly. And Mr. Clarence Priddy, praising the fine performance and long life of American Fence, *knows* this when he says "American Fence really stays with you."

He and his father, Harry O. Priddy, share their 365-acre farm jointly, and they both agree that American is *the* farm fence to use. "American Fence is so easy to put up," adds Clarence Priddy, "and when you stretch the fence tight, it *stays* tight. Those American 'U' Posts we use stay straight, too. We have no trouble with them at all. And they're easy to drive."

On their joint acreage, Clarence and Harry Priddy raise corn, wheat, and clover. Their livestock consists of over 300 hogs, 34 Holstein cows, and a herd of Herefords—usually between 50 and 100 head. Over 1100 rods of American Fence are used on the combined Priddy farms—topped off with American Barbed Wire and strongly supported by American Steel Posts.

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UNITED STATES STEEL

Rigid supports

From page 47

for flexible price supports. From that day until now, a large group of farmers and farm leaders have objected to flexible price supports just as vigorously as others have defended them.

Senator Milton R. Young of North Dakota, long an advocate of fixed price supports at 90 percent of parity, recently said: ". . . Let's get one thing straight—there is a good case for 'high' rigid price supports on farm products . . .

"A change to flexible supports would simply mean lower farm prices and lower farm income.

"Take off 'high' supports, let farm prices continue to drop . . . and in my opinion, the national income will be shattered to depression depths.

". . . 90-percent price supports have been blamed for present reserves or 'surpluses' of wheat and corn. Actually, these reserves are a guarantee of *ample* supplies at *fair* prices to consumers and livestock feeders in this country and in all friendly nations.

"*And we can control reserves.* The present price-support legislation at 90 percent of parity provides for production and marketing control in case of oversupply."

On the subject of present high reserves, R. M. Evans, long-time agricultural leader and a member of the Federal Reserve System Board of Governors, says they were *planned* as a result of "the practical experience of a war fresh in the minds of everyone—and if a war *had developed* we would not have enough right now.

"Such a situation must never be allowed to happen again," Mr. Evans says. "If the government asks farmers to produce abundantly for the defense effort, then the government must adopt a program to *protect* the farmer."

On price-support levels, Mr. Evans says, "Some people believe that low price supports will have a tendency to reduce production. *There is no historical proof of such a result; on the contrary, the opposite is true.* The farmer has his fixed costs to meet from the sale of his products—so he raises *more* rather than *less*."

Advocates of a *continuation* of fixed price supports at 90 percent of parity point out that the flexible formula in the Agricultural Act of 1949 avoids *none* of the problems the flexible-support group wants to avoid.

If the flexible features of the Agricultural Act of 1949 were in effect today, supplies are so large that Secretary Benson could set 1954 price-support levels as low as 75 percent of parity for wheat, 75 to 80 percent of parity for cotton, and around 80 percent of parity for corn. Since the support levels on *all major* crops would be dropped, there would be *no* incentive for *production shifts* among the crops.

The advocates of flexible supports *assume* that when supplies of one product accumulate, there are other products in

need of expansion. This is not true today, and probably won't be true in the next few years. Supplies of all major farm products are ample or excessive in relation to market outlets. Lower support levels would *merely result in lower farm incomes* with little opportunity for economic production shifts.

Nor would flexible price supports avoid the marketing quotas and acreage allotments in prospect for 1954 and 1955.

With the sharp drop in exports and the existing carryover stocks, marketing quotas and acreage allotments would be required for almost all of the basic commodities in 1954. And this, even though the price supports were 75 percent of parity—the minimum level in the 1949 act. And for cotton, wheat, and peanuts at least, the same situation probably will prevail in 1955 and 1956.

The advocates of fixed price supports get down to specific cases on the demand side, too. They quote the wheat specialists who report that there is little opportunity, at this time, for expanding marketings of wheat *either* domestically or in foreign markets. Even though the price-support level is dropped to 75 percent of parity, they see little expansion in wheat sales.

The only additional outlet for large quantities of wheat at this time is for livestock feed. But prices must be less than 75 percent of parity for feed wheat, if large quantities are to be fed. Furthermore, we already have ample reserve stocks of feed on hand.

Cotton specialists also estimate that only *small* increases in marketings would occur in the next year or two if cotton support prices were dropped to 75 percent of parity.

Feed-grain and livestock specialists find that price is more of a factor in the rate of feed-grain utilization than in the case of wheat and cotton. But even here, a drop of 10 percent in feed-grain prices would increase use only 5 percent. Lowering feed-grain prices not only *lowers the income of the producers of cash grains*, it leads directly to increased livestock production and *lower income from livestock products* within the next marketing years.

> **Though we should be grateful for good houses, there is, after all, no house like God's great out-of-doors.**
> —*Robert Louis Stevenson*

The advocates of fixed price supports recognize that some flexibility of individual farm prices to permit and encourage adjustments in production and utilization may be necessary. But, they insist that a floor is needed under farm prices at 90 percent of parity. Incentives for increased production of specific products should take the form of market prices *higher* than 90 percent of parity. Marketing quotas can be used to keep supplies in line with amounts used at the 90-percent-of-parity floor level. **END**

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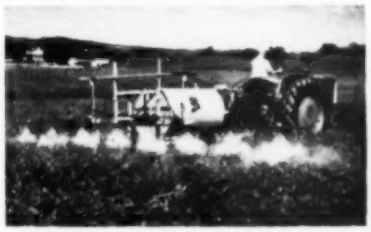

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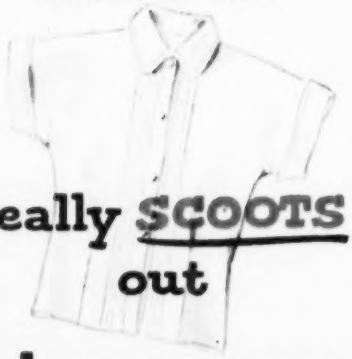

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For Easter—a dinner to remember

From page 66

Honey-glazed Ham

10- to 12-pound uncooked ham	1 cup brown sugar
½ cup honey	½ cup orange juice

Place ham, fat side up, on rack in open roasting pan. Do not cover and do not add water. Bake at 325° (slow) for about 3½ hours (about 18 to 20 minutes per pound of ham). Half an hour before ham is done, trim off rind and score fat in diamond shapes. Combine honey, brown sugar, and orange juice, and mix well. Spread over ham. Bake remaining 30 minutes at 325° (slow) until ham is well glazed. (Ham may be garnished with Pimiento Flowers last 15 minutes of glazing time.) *To make Pimiento Flowers:* Cut flower shapes from whole pimiento with a small cutter or a sharp knife. Arrange evenly in scored diamond shapes. Cut stems and leaves from green pepper. Garnish platter with Sweet-potato Puffs and bunches of parsley. When it comes to carving, make sure your carving knife is sharpened to a razor edge. Time dinner so the ham can stand 20 to 30 minutes after it comes out of the oven. The meat will firm up and carve better.

There are many good glazes for hams. Here are several that you might want to try.

Spread the ham with a paste made of 1 cup brown sugar, 1 teaspoon dry mustard, and 2 or 3 tablespoons vinegar. Return ham to oven for 30 more minutes. Baste occasionally with fruit juice, cider, or juice from pickled peaches.

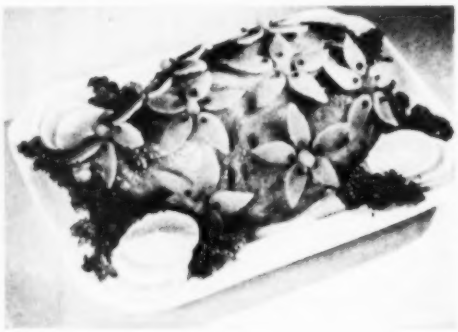
Or try ½ cup maple syrup, ½ cup apple juice, and 2 tablespoons mustard. Here's another: Cook ½ pound fresh cranberries with 1 cup maple syrup until skins pop open. Press mixture through a sieve and spread over ham.

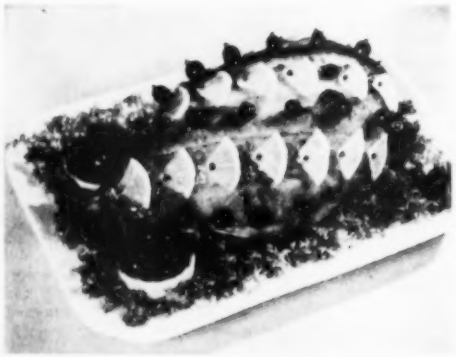
And for a real "quickie," spread a cup of melted currant jelly over the ham; then return to oven for 30 minutes.

Try these easy and attractive garnishes

Candied Orange Daisies: Cut out orange-peel petals; cook in hot water for 10 minutes. Drain; cover with hot water. Simmer till tender.

Cook in syrup of 2 cups sugar and 1 cup water until translucent. Arrange petals on unscored ham; secure with whole cloves. Center flowers with small green gumdrop.





Orange and Cherry Rows: Score the ham diagonally. Arrange alternate rows of orange wedges (slice the orange thin; cut each slice in quarters) and rows of candied red cherries.

Secure orange wedges and cherries with whole cloves. Garnish plate with scooped-out orange halves filled with cherry preserves.

Stanley

Pineapple Petals: Score ham in diamond shapes. Cut 5 or 6 wedges from each pineapple slice. Toothpick pineapple wedges to ham with a maraschino cherry.

Alternate the directions the wedges point. Garnish edge of platter with celery leaves and spiced crabapples.

Here's the only mix that wins on all 4 "musts" for homemade cake!

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1 Homemade size
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3 Homemade moistness
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Swans Down Cake Mixes

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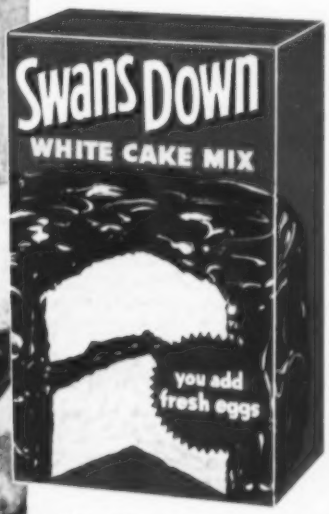

Try a different Swans Down Mix every time you bake a cake—White, Yellow, Devil's Food, Angel Food! All heavenly.

*Test made by 4,375 home bakers in their own kitchens.

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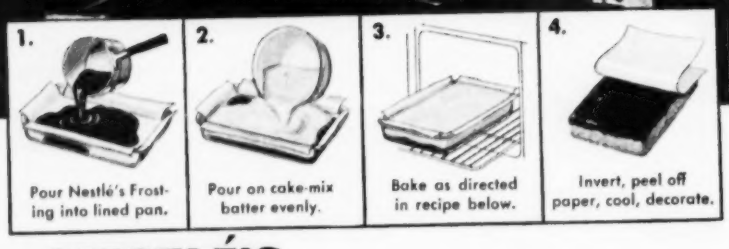

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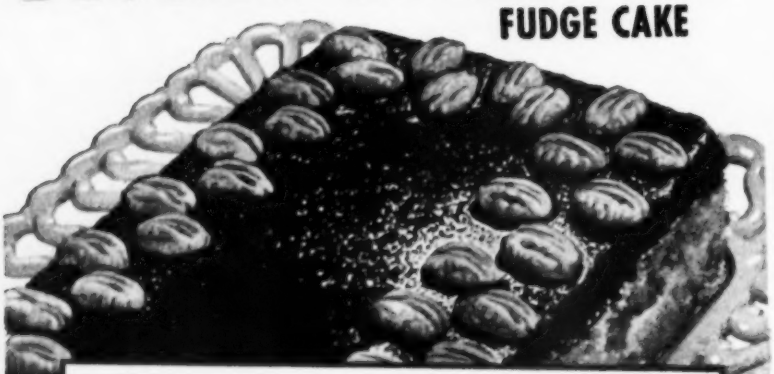
FROST'N' BAKE

FUDGE CAKE



Nestlé revolutionizes cake-making with the cake you FROST BEFORE BAKING! It's amazing—you make the special rich fudgy frosting with the wonderful Nestlé's Semi-Sweet Chocolate flavor—and pour it into a lined pan. Cover with cake mix batter (they *won't* run together) and bake. When you turn it out, turn it over, and there's your FROST 'N' BAKE FUDGE CAKE—a brand new cake thrill! It's a Nestlé exclusive—so get Nestlé's Morsels in the yellow bag with the recipe.

FROST 'N' BAKE FUDGE CAKE

Melt over hot (not boiling) water 1 pkg. (1 c.) Nestlé's Semi-Sweet Chocolate Morsels. Add ⅔ c. sweetened condensed milk, 2 tbs. water, 1 tsp. vanilla. Pour into baking dish 12" x 8" x 2" lined on bottom and sides, as illustrated, with double thicknesses of waxed paper each way. Then prepare 17 or 20 oz. white or yellow cake mix by pkg. directions. Pour *gently* over chocolate. Bake at temperature recommended *until cake tests done* (longer baking is needed.) Invert cake onto rack. Lift off dish. *Let stand 2 min.* Peel off paper. Decorate promptly with nuts. Let cool.

Guaranteed by Good Housekeeping

PLUS YOUR FAVORITE CAKE MIX

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More uses for

Muffin pans

Look at all the ways you can keep muffin pans busy

To keep drawers neat, delegate a new muffin pan to your dressing table. Use cups for powder, bobby pins, safety pins, earrings, buttons, lipsticks. Try one in the desk drawer, too. (Anchor the pan to the drawer with a couple of small screws.)

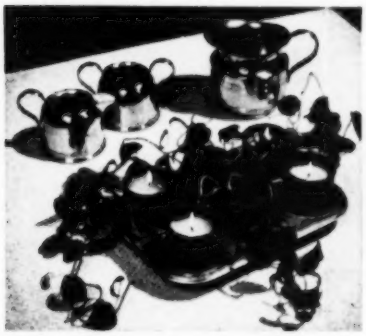
Start seedlings in a muffin pan—it's ideal for keeping each little group of seedlings isolated. Individual groups of plants can be lifted from the cups intact for transplanting to the outdoor garden as soon as warm spring weather comes round

An easy way to bake apples or bake stuffed peppers is to put each one in a separate cup of the muffin pan. They can't topple over and each has its fair share of flavorful juice and seasonings.

If you're cooking a food that needs covering, use another muffin pan upside down.

An ideal food-serving tray can be made by using gay-colored paper baking cups as liners in a muffin pan. Put portions of each food in separate cups.

Paper drinking cups for fruit juice and milk set in compartments of the pan won't upset easily. Paper liners and cups can be destroyed — saves on work of dishwashing, and no sterilizing of dishes is necessary.



Make an attractive centerpiece by placing altar candles and trailing vines in muffin cups. If desired, paint the pan in colors to harmonize with the table setting

Photographs: Fletcher

For refrigerator storage, a muffin pan is a good organizer. It can hold a whole series of opened jars of baby food. Or, it is a handy tray for partly used jars of pickles, salad dressings, olives, and sundae sauces.

To keep soft fruits like peaches and tomatoes from being bruised, put each fruit in a separate cup of a muffin pan before putting them away on refrigerator shelves.

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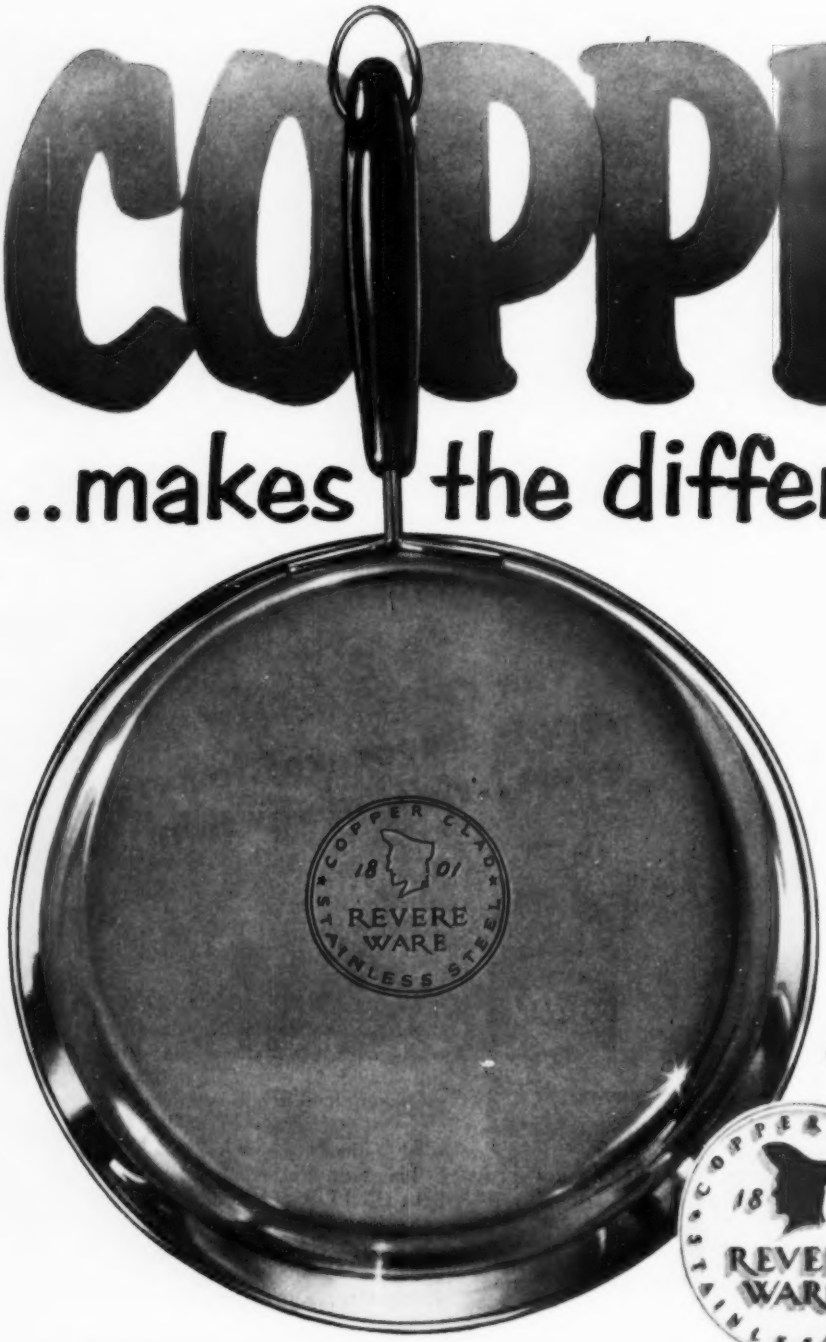

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*Taken at 100°C., the boiling point of water.

Source: Handbook of Chemistry and Physics—34th Edition.

So-easy meals for spring

Young Doug will have to wait a few hours before he can taste that good dessert. It's fixed early to be ready to eat at dinnertime

Dinner's a snap with these two "he-man" meals—planned to give you more freedom from the kitchen. Fix food beforehand; it waits in the refrigerator. Then it takes just a minute to pop main dishes into the oven. That's all you do until dinnertime

By Ann Gloe

Mrs. Hugh Elson, a young attractive farm wife who lives near Waukee, Iowa, especially enjoys these "fix-ahead" meals when the weather is too nice to be indoors. She finds them handy, too, when she has planned a shopping trip to nearby Des Moines. And with one of these meals in the refrigerator, she can entertain in the afternoon or go to meetings with no worries about supper for her husband and two youngsters.

After breakfast, Mrs. Elson prepares the meat, salad, and dessert and tucks them into the refrigerator. Then the meal is all ready except for the few minutes it takes to put the meat and potatoes in the oven at the right time.

You may find these meals extra helpful if you like to entertain without a lot of last-minute fuss. With beforehand preparation, you can spend time with your guests instead of in the kitchen.

These meals are hearty, but they're keyed to give spring meals a lift. Why not give yourself a break and try one of them on those days when you want to turn your back on the kitchen?

Recipes are on page 112

Photographs: Hopkins, Stanley

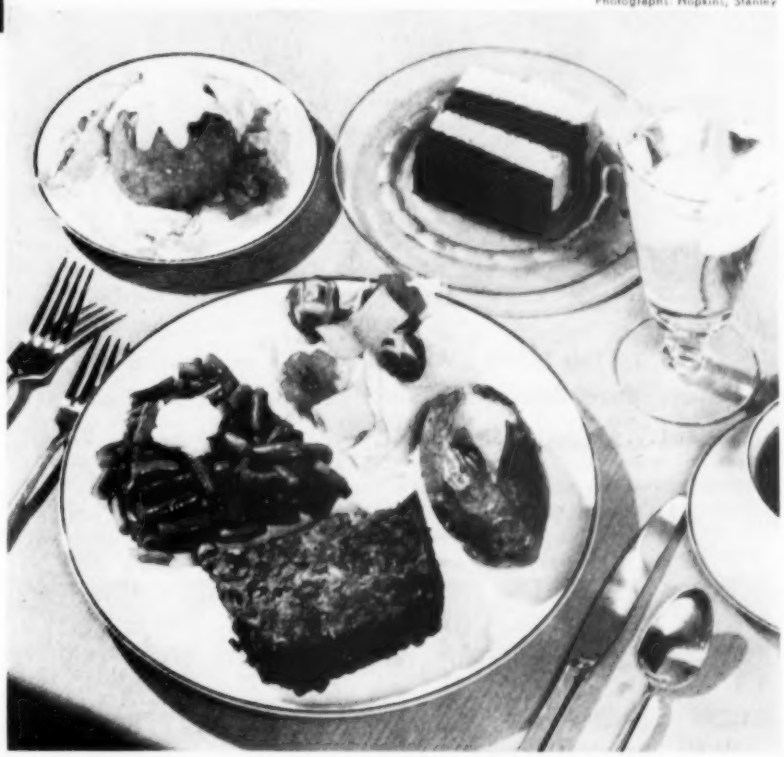
These are the two good menus which will make your spring meals so easy

Lazy-day Meal

So-good Meat Loaf
Baked Potatoes
Buttered Green Beans
Sunshine Salad — Vegetable Relishes
Chocolate-Mint Ribbon Cake
Milk — Coffee

Spring-fever Special

Glazed Pork Chops
Scalloped Potatoes Supreme
Buttered Peas
Lettuce Wedges with
Blue-cheese Dressing
Orange Chiffon Pie
Milk — Coffee



Dinner's ready and what a breeze to fix! It's hearty, too—grand for hungry menfolks. Serve it as proudly as your fanciest meal, while thanking your stars it is so easy

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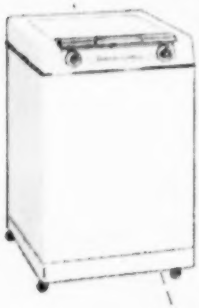

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... no wringers to wrestle ...
your hands stay *out* of the hot water!

This BENDIX WASHER washes or rinses, drains, damp-dries, and shuts itself off—*all automatically!*

And . . . you can just fill it yourself, so you don't need water pressure, you don't need an automatic water heater. Does a big wash with new Bendix Super-Agitator cleansing action—gets those work clothes *clean!* Floataway-Flushaway draining keeps dirty washwater from re-soiling clothes. Completely portable—rolls anywhere, stores anywhere! New flexible Metexaloy Wondertub is so dependable it's *guaranteed in writing for 5 years!*

BENDIX HOME APPLIANCES
PIONEER OF WORKLESS WASHDAY

BENDIX HOME APPLIANCES, AVCO Manufacturing Corp., Cincinnati 25, Ohio

So-easy meals for spring

From page 111

So-good Meat Loaf (Makes 8 servings)

- 1½ pounds ground beef
- ½ pound ground pork
- ¼ cup finely chopped onion
- 2 tablespoons finely chopped celery
- 2 teaspoons salt
- ½ teaspoon poultry seasoning
- ¼ teaspoon pepper
- ¼ teaspoon dry mustard
- 4 slices fresh bread, cubed
- ½ cup milk
- 2 eggs
- 1 tablespoon Worcestershire sauce

Mix meats thoroughly; add onion, celery, and seasonings. Soak bread cubes in milk; add eggs and Worcestershire sauce. Beat until well blended. Combine meats and egg mixture. Place in a 9x5x2¾-inch loaf pan, or shape into a loaf and place in shallow baking pan. Cover and refrigerate until 1¼ hours before mealtime. Bake at 350° (moderate) for 1¼ hours.

Baked Potatoes

They'll be satisfactory baked with meat loaf at 350° (moderate) for 1¼ hours.

Sunshine Salad (Makes 8 servings)

- 1 3-ounce package lemon-flavored gelatin
- 1 cup hot water
- 1 cup pineapple syrup and water
- 1 tablespoon vinegar
- ½ teaspoon salt
- 1 cup grated raw carrots
- No. 2 can (2½ cups) crushed pineapple, drained
- ½ cup chopped pecans

Dissolve gelatin in hot water. Add pineapple syrup and water, vinegar, and salt. Chill until slightly thickened. Combine carrots, pineapple, and nuts; fold into slightly thickened gelatin. Turn into a 10x6x1½-inch pan or individual molds. Chill until firm. Unmold on crisp lettuce.

Chocolate-Mint Ribbon Cake
(Makes 8 servings)

- 1 package chocolate-cake mix
- 1 quart peppermint ice cream
- 3 sticks peppermint candy, crushed

Prepare chocolate-cake mix according to package directions. Bake in a paper-lined 13x9x2-inch pan at 350° (moderate) for 30 to 40 minutes or until done. Let cake stand 10 minutes; remove from pan. Cool. Cut cake in half lengthwise. (Frost half for tomorrow's dessert.) Trim the other half to fit into freezer tray. Split cake crosswise to make layers. Place one layer in freezer tray. Stir ice cream to soften; spread half on cake in tray. Place other layer of cake on ice cream. Spread with remaining ice cream. Decorate top of ice cream with candy. Freeze until firm.

Glazed Pork Chops (Makes 6 servings)

- 6 loin pork chops, 1 inch thick
- 1 teaspoon salt
- 1½ cups brown sugar
- 3 tablespoons vinegar
- 1 teaspoon dry mustard
- Dash of ginger

Trim excess fat off chops; arrange in 13x9x2-inch baking dish. Sprinkle with salt. Combine the remaining ingredients; spread over chops. Refrigerate until 1¾ hours before mealtime. Bake at 350° (moderate) for 1¾ hours. Turn them over to serve.

Scalloped Potatoes Supreme
(Serves 6)

- 5 cups sliced potatoes
- ¼ cup chopped green pepper
- ¼ cup minced onion
- 2 teaspoons salt
- Dash of pepper
- 1 can condensed cream of mushroom soup
- 1 cup milk

Alternate the layers of potatoes, green pepper, and onion in a 2-quart baking dish. Season each layer with salt and pepper. Mix mushroom soup and milk. Pour over potatoes. Cover. Store in refrigerator until 1¾ hours before mealtime. Uncover and bake at 350° (moderate) for 1¾ hours.

Blue-cheese Dressing (Makes 1¾ cups)

- 1 cup sour cream
- ¼ cup chopped chives or green onion
- 2 tablespoons mayonnaise
- 2 tablespoons lemon juice
- ½ cup crumbled blue cheese

Combine all ingredients. Let stand several hours in the refrigerator before serving. Serve on generous wedges of head lettuce.

Orange Chiffon Pie

- 1 tablespoon unflavored gelatin
- ¼ cup cold water
- ½ cup sugar
- ½ cup orange juice
- ½ teaspoon salt
- 4 egg yolks
- 2 teaspoons grated orange peel
- ¼ cup sugar
- 4 stiff-beaten egg whites
- 1 9-inch baked pastry shell

Soften gelatin in cold water. Combine ½ cup sugar and orange juice. Add salt to egg yolks and beat until thick. Add fruit-juice mixture; beat well. Cook over hot water until mixture coats a spoon. Remove from heat; add gelatin and stir until dissolved. Add orange peel. Chill until partially set (it sets fast). Gradually beat ¼ cup sugar into egg whites. Fold into custard mixture and pour into cooled pastry shell. Chill until set. Top with whipped cream; garnish with orange sections.

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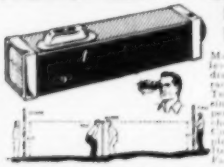

Makes quick work of establishing level foundation lines, locate drains, ditches, fences, roads, terraces, etc. Extremely accurate. Tested by thousands of users. So simple a boy can use it. Indispensable to Farmers, Home Mechanics, Carpenters, Masons, Contractors, Engineers. Complete with instructions. Item 312. Wt. 1 lb. Factory Special $2.50

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Tractor shown with Rotary Tiller Attachment. Item 206

Rotary Tiller	$42.50	Bulldozer	$13.25
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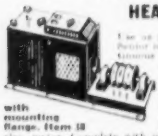
Freight prepaid to most areas. Easy payment plan available.

HEAVY DUTY D-C ARC WELDER



Use as portable or shop welder. Up to 300 amps. Senior model. Made for years of trouble-free, continuous service. Will handle light or heavy jobs. Easily weld up to ¼" plate using ⅛" rods. Built-in air-cooling system. Arc is easy to strike and hold, because of specially designed arc stabilizer. Hi-lo switch and dial control give wide range of welding heats. Run welder at 2000 rpm. with tractor, jeep or 10 hp. gas engine, or 7 hp. elec. motor. Complete with instructions, gout and triple V belt or flat pulley. You can pay more, but you can't buy a better welder. with mounting flange. Item 18 $99.75

DUAL CONTROL MODEL same as above but with built in dial rheostat for low heat soldering, brazing. $119.50

WELDING KIT. Two in 1: tools, welding helmet, electrode holder, ground clamp. Sold only with welder at $10.50

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100 ft. An ideal cord for lawn mowers, hedge trimmers, outdoor lights, etc., because it's super flexible and tough. No. 16-2 cord, extends electric life up to 400 ft. without voltage drop. Complete with heavy duty rubber plug and outlet. Wt. 7 lbs. Item 203. Regular $14.95. Factory Special $4.79

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Goshen, Indiana

By Kenneth L. McFate
Iowa State College

Test for safe water supply

With the arrival of spring come thaws and rains, which can contaminate farmstead drinking-water supplies. Sometimes, the family drinking this water is totally unaware of such dangers which, incidentally, are more common among open-top, poorly constructed, shallow-dug wells.

Much of the contamination is the result of surface runoff from barnlots and other sources of pollution. These surface waters enter wells through open or semiopen tops or through poor construction of well walls.

Drilled wells can become contaminated the same as shallow-dug wells. For instance, in one north-central Iowa county an organized health-department testing program showed that out of 233 wells (of which 83 percent were drilled) tested in the fall of 1952, only 127—or 54 percent—were satisfactory.

What constitutes *unsafe* water? When each sample of a drinking-water supply is collected and sent to the laboratory, it is analyzed for the presence of coliform bacteria and the amount of nitrates.

Coliform organisms are bacteria which live in the intestinal tract of warm-blooded animals. When coliform bacteria are present in water, there is the chance that other bacteria, such as typhoid carriers, can get into the water by the same means. The United States Public Health Service Drinking Water Standards require that *no* coliform organisms be present in a *safe* drinking-water supply.

The nitrates test is made on all samples to indicate whether this water in a baby's formula might cause cyanosis or blue-baby disease.

The steps on this page show you how to

[*Turn to page 126*

Obtain special sterile bottle from state water-testing laboratory. Collect sample without rinsing container. Immediately replace cap to prevent contaminating the sample. See your county agent or vocational agriculture instructor for lab location

Completely fill out data card you received with special container, put it with water sample, and enclose in protective cans for trip to laboratory. Some states require small fee to cover costs. Enclose it, too

Photographs: Author

Flaming spout or faucet with asbestos wick saturated in alcohol to kill bacteria not originating in water supply is first step in test. Well location and construction should be pollution—proof before test

Fill out label with return address, wrap it around container. Mail sample so it arrives at laboratory within 72 hours from the time sample was collected. If water tests unsafe, correct contamination source

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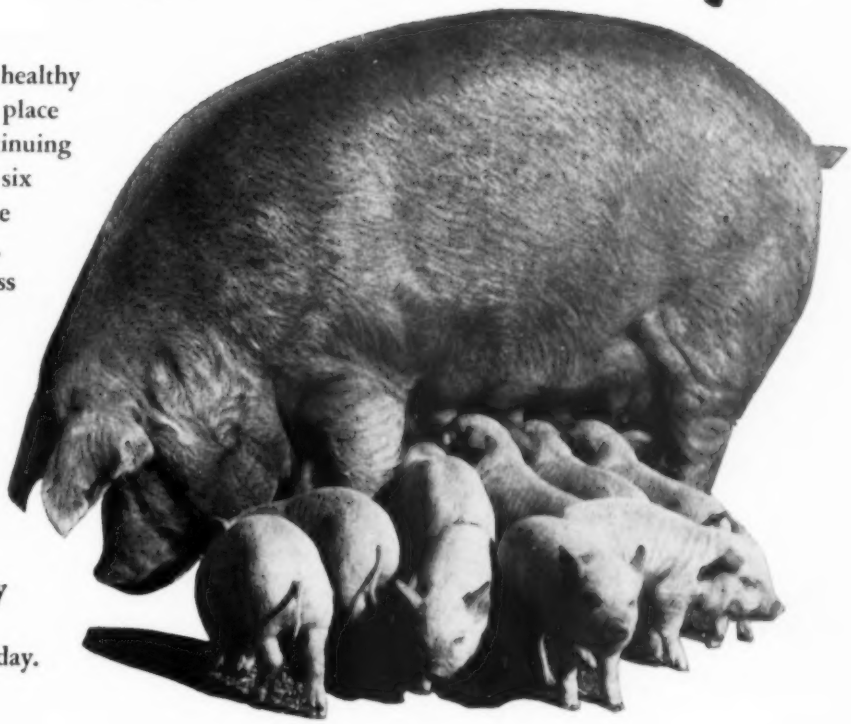
Healthy hogs mean healthy profits for you. The starting place is at farrowing time . . . continuing right on through those first six dangerous weeks when disease can cause losses so easily . . . reduce profits so fast. Dr. Hess has a complete line of products for farm animals of all kinds and ages.
For more than sixty years, farmers have relied upon Dr. Hess Farm-aceuticals . . . relied upon them to keep livestock and poultry healthy . . . and profitable.
See your Dr. Hess dealer today.



Necrono knocks "Necro"

Dr. Hess Necrono, containing nitrofurazone, used as individual drench treatment can rid herd of necro quickly, economically, safely. Used in thin slop, it serves as preventative for disease-exposed hogs.

Pig Plants save baby pigs

Protect your pigs from setbacks with bacitracin in Dr. Hess Pig Plants. Implant the new, wonder-working Pig Plant behind pig's ear in the first five days. Reduces pig losses . . . results in less scouring . . . increases weaning weights.

Hogoyl for Mange and Lice

Dr. Hess Hogoyl, containing benzene hexachloride, in oil base, kills lice and mange. Easy to apply . . . one treatment does the job. Hogoyl sprays easily . . . doesn't gum up. Can be used in hog oilers, or rubbing posts. Effective in wallows.

Warfarat gets rid of rats...

Warfarat, containing Warfarin, is specially prepared, easy, low-cost, ready-to-use bait rats and mice love. Causes death by internal bleeding. Packed in handy bait boxes. Rid your farm of expensive, germ-carrying rodents the scientific Warfarat way.

Dr. HESS

Scientific *Farm-aceuticals* Since 1893

Dr. Hess and Clark, Inc., Ashland 2, Ohio

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cake decorator
for Birthday Cakes

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How to make Hot cross buns

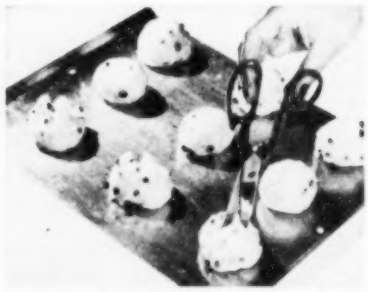
Here's an Easter breakfast idea you'll want to make a family tradition. The buns are plump, tender, and full of currants. Make them a day ahead. Then for a leisurely breakfast on Easter morning, all you do is reheat them and add the icing cross.

Hot Cross Buns (Makes 3 dozen)

- 1 package active dry or 1 cake compressed yeast
- ¼ cup water
- 1¾ cups milk, scalded
- ½ cup butter
- ½ cup sugar
- 1½ teaspoons salt
- 1 beaten egg
- 6½ to 7 cups sifted flour
- 1 cup currants
- Confectioners' Sugar Icing

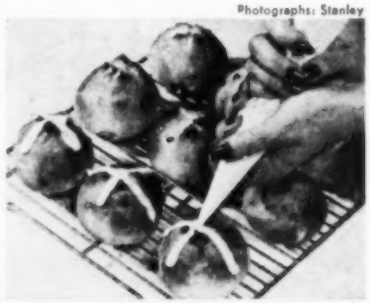
Soften active dry yeast in warm water (110°), compressed yeast in lukewarm water (85°). Combine scalded milk, butter, sugar, and salt; stir to melt butter. Cool to lukewarm. Add softened yeast; beat in egg. Add 3 cups of flour; beat well. Stir in currants. Beat in remaining flour; knead until smooth. Place in greased bowl, turning once. Cover and let rise in a warm place until double (about 2½ hours). Punch down. Shape into balls about 2 inches in diameter. Arrange on greased cooky sheet. Brush tops of buns lightly with melted butter. Cover and let rise until double (45 minutes to 1 hour). Cut crosses in tops of buns. Bake at 400° (hot) for 15 to 18 minutes. Brush again with melted butter. Make crosses on top of buns with *Confectioners' Sugar Icing:* Combine 1 cup sifted confectioners' sugar, ¼ teaspoon vanilla, dash of salt, and about 1½ tablespoons milk.—*Mrs. Andrew De Rueter, Michigan*

After dough has raised once, punch down. Pinch off dough; shape into buns. Arrange on greased cooky sheet; brush tops with melted butter. Cover; let rise till double



Cut a shallow cross in the top of each bun with kitchen scissors or a knife dipped in flour. Bake at 400° (hot) for 15 to 18 minutes until the tops are a golden brown

Photographs: Stanley



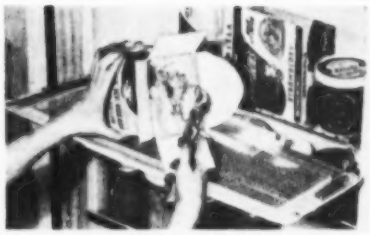
Make icing crosses on tops of buns. For a pastry tube, roll a sheet of waxed paper or white typing paper into a cone. Snip off pointed end. Fill with icing. Force icing through tube by squeezing it with hands

Everything within easy reach when you own a

New G-E Upright Freezer

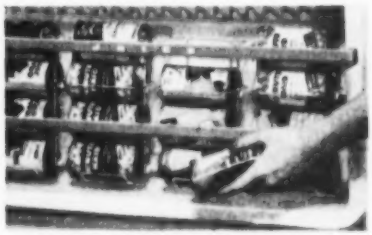
Holds 525 pounds! Yet this new 15-cubic-foot G-E Upright Freezer takes less than one square yard of floor area—no more than your refrigerator. Price $519.95.

ABOUT **$5.50*** WEEKLY



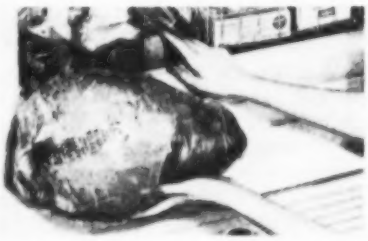
Ice cream ready for serving!

Special Ice Cream Conditioner keeps a gallon and a half of ice cream at perfect scooping temperature.



Fruit juice at your fingertips!

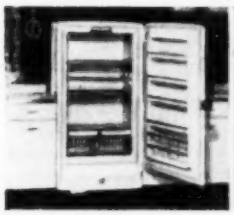
New frozen juice can dispenser keeps a full 16 cans of frozen fruit juice within easy reach.



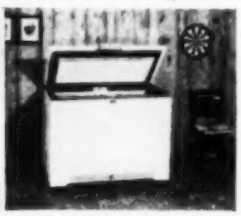
A place for bulky packages!

A hidden Stor-well at the bottom of the freezer comfortably holds bulky items such as hams, turkeys and large roasts.

A new, sensible way to buy freezer space!



For compact convenience in kitchen—11-cubic-foot G-E Upright Freezer



For roomy, bulk storage elsewhere—11-cubic-foot G-E Chest Freezer

Here's a wonderful solution for those who need 20 or more cubic feet of freezer space, but who haven't kitchen space for one of those "box-car-like" freezer chests. You can buy *both* G-E Freezers shown here and get 22 cubic feet of storage space. Ask your G-E dealer about this great combination offer!

ENJOY complete freezer convenience in your kitchen with the new G-E Upright Freezer. Every feature, from slide-out shelves to the handy frozen fruit juice dispenser, helps make the job of food storage and preparation *faster* and *easier*.

So very dependable, too! Every G-E Freezer has the same type of sealed-in refrigerating mechanism that has kept 3,500,000 G-E Refrigerators operating so efficiently for periods of 10 years and longer.

Choose from a complete line of upright and chest models. Prices begin at just $299.95. See your G-E dealer soon. General Electric Company, Appliance Park, Louisville, Kentucky.

**After small down payment. See your G-E dealer for exact terms. Prices and specifications subject to change without notice.*

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No other kind of protection is as remarkable in preventing odor from forming. That's another reason for the remarkable popularity of Tampax.

No other kind of protection is as easy to dispose of. Actually, Tampax is so small that a month's supply slips into the purse.

No other kind of protection can be worn conveniently in shower or tub. Tampax can!

Doctor-invented Tampax is made of pure, compressed surgical cotton in throwaway applicators. Get your supply at any drug or notion counter in a choice of 3 absorbencies: Regular, Super, Junior. Tampax Incorporated, Palmer, Mass.

Accepted for Advertising by the Journal of the American Medical Association

Wonderful ways with windows

From page 57

Problem

Typical of many old homes, and even new ones, are the two windows with a space between like the ones shown.

That was the problem in the August Leisy farm home near Wisner, Nebraska.

Answer

Two windows take on importance in room with this treatment of draperies.

Red faille draperies and cornice are combined with sheer glass curtains to cover the whole area.

Different-size windows in any room can be made to look the same size with clever treatment!

Mrs. J. H. Volden made this small window behind buffet look as "grown up" as other windows with full-length draperies.

Bay windows are often a problem when it comes to what to do with them curtain-wise.

This attractive bedroom shows one of many ideas. Four tiers of the washable white curtains are hung to cover whole wall area. They could be easily made by using white sheeting and pleating tape. Are easily laundered, too!

You paint best—for less . . .

with the Stay-Fresh Colors you get only in

SPRED SATIN

Colors: SPRED SATIN *Flamingo (3444) walls; Diamond (135) ceiling; Charcoal Black (3434) shutters.*
SPRED GLOSS *Coral Rose (48) woodwork; White (3218) window trims*

With SPRED SATIN, you can easily and quickly decorate an entire room—walls, ceiling, woodwork—all with a single purchase of paint. No special thinners or brush cleaners to buy. And you get luxurious *lasting* satin beauty on every surface. You repaint only when you want to, because SPRED SATIN is *guaranteed washable*—scrub it again and again!

COLOR CHOICE IS SIMPLE
See the giant color card on display at your SPRED dealer's store. You'll love the 180 beautiful shades...from lightest pastels to popular deep tones.

FASTEST CLEAN UP
Just rinse out brush or roller under water tap. In a few seconds they're ready for your next use. And floor-spatters wipe up quickly with a damp cloth!

GUARANTEED WASHABLE
40,000 scrubbing strokes on a SPRED SATIN panel failed to change the color... or mar the satiny texture... or in any way affect the durable latex finish.

SPRED *Color Twins*

a soft satin sheen or a rich glowing enamel

SPRED SATIN—for walls, ceilings, woodwork, too! A luxury finish with a tight latex film that resists dirt, stays new-looking longer. So washable, so durable!

SPRED GLOSS—easy-to-apply beauty for bathrooms, kitchens, all woodwork...wherever you prefer a rich luster finish...not a glaring sheen, but a subdued gloss.

Glidden *Pacemaker in Paints*

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Meet your HOMEtown Insurance Agent

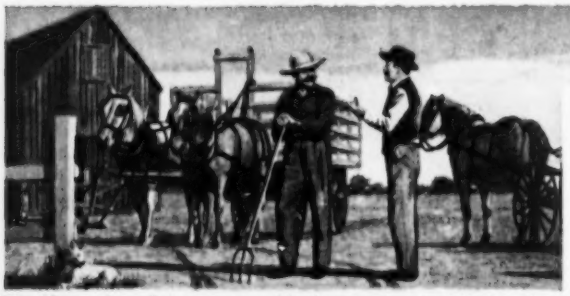
HOW TO GROW...IN A BUSINESSLIKE WAY

Crops don't just grow like Topsy—not any more. Today's farmer is a real businessman—a combination weatherman, mechanic and accountant as well as a master of agriculture or animal husbandry. Even so, he faces the hazards of fire and hail that could wipe out his year's work—except that he is *protected by insurance.* That's why farmers and Home Insurance agents work hand-in-hand—partners in protection and production.

P. S.—those agents talk the farmer's language, too. That's why they make such a fine team.

Are *you* in this picture?
How long since you have had an expert insurance survey of your home, furnishings and personal belongings? Better do it soon—you'll be surprised at the total value of your possessions, and how *little* it costs to have full protection for them.

☆ **Your HOMEtown Agent can serve you well—see him now!**



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The Home Indemnity Company, an affiliate, writes Casualty Insurance, Fidelity and Surety Bonds

The Home, through its agents and brokers, is America's leading insurance protector of American homes and the homes of American industry.

Livestock news

Corncobs make good feed for gilts and sows, too

Cattle aren't the only animals that can use corncobs in the ration.

S. W. Terrill, head of Illinois' swine division, says he's had good results self-feeding ground corncobs to bred sows and gilts. Only about one-third of the ration is corncobs.

Here is the ration suggested by Terrill: 700 pounds ground corncobs, 600 pounds ground shelled corn, 200 pounds alfalfa meal, and 500 pounds protein supplement. For best results, says Terrill, feed sows so they'll gain ¾ to 1 pound a day. If they gain more, cut down on the corn and increase the cobs and alfalfa in the ration, he says.

• • • •

Sows don't feel crowded in these farrowing stalls

Murray Colbert, of Montgomery County, Missouri, used to farrow his sows in enclosed crates mounted on runners. The sows were nervous, says Colbert, because they felt cooped up.

So Colbert built five farrowing crates, shown below, in his central farrowing house. Sows do a better job of raising pigs now. He keeps them in the stalls till pigs are about 4 days old.

With the crates arranged this way, one heat lamp serves two litters. If he were building the stalls over, Colbert says he would make one change. He'd leave an alley along the back of the crates to feed and water the sows. With the sows facing the backs, Colbert now has to climb between the stalls to feed and water the sows.

Below, Colbert examines a new litter. Note the removable doors, hinged gates.

Pasture makes beef gains as cheaply as green chop

Steers on rotated pasture gained slightly faster than steers fed grass that was chopped and hauled to them, in recent Purdue University experiments.

Steers on rotation pasture gained .99 pound daily, while those fed 90 pounds of green, chopped forage a day gained only .86. All steers weighed about 925 pounds at the beginning of the tests.

Steers given 1¼ pounds of Purdue supplement G along with 90 pounds of chopped forage gained .96 pound daily. This was not an important increase in gain or feed efficiency.

Other steers, given 70 pounds of chopped forage and 7½ pounds of shelled corn, along with 1¼ pounds of Purdue supplement G, didn't gain rapidly nor put on enough finish.

• • • •

Strange mucosal disease deadly to cattle

This recently discovered disease, causing ulcers on mucous membranes in mouth and nostrils, is most likely to strike in winter and early spring.

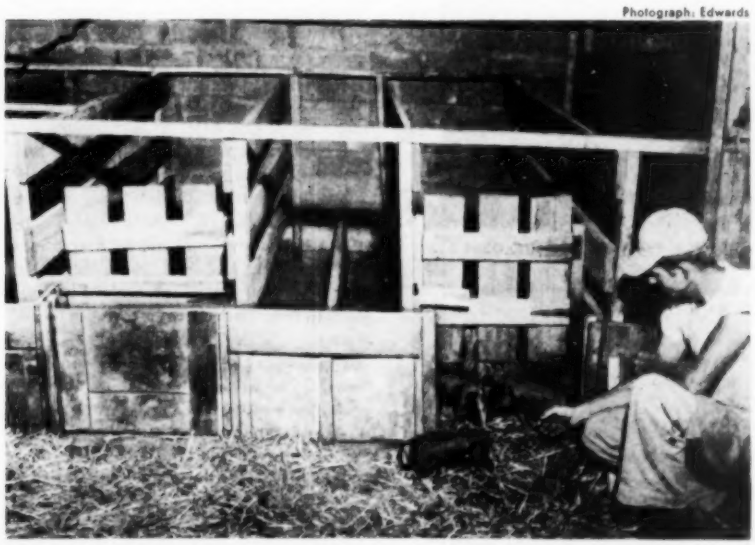
It's similar to hyperkeratosis and virus diarrhea. Symptoms include a sudden rise in temperature and rapid return to normal, complete loss of appetite, watery scours, drooling, and emaciation.

Sulfa drugs and antibiotics have had no effect on the disease. Blood transfusions have helped temporarily, but relapses followed. Only three animals have been known to survive mucosal disease.

Veterinarians are continuing to study the disease, in hopes of finding a cure.

[*Turn to page 125*

Photograph: Edwards



Relieve the *Pressure Pain* of sore aching muscles

• When muscles get stiff and lame from overexertion, don't let them "lay you up." There's a way to relieve that ache and soreness—quickly, easily!

Doctors generally will tell you this pain and stiffness may be largely caused by *pressure*. Sensitive nerves are irritated. Local areas become swollen, sore. That pain is simply Nature's call for help.

For blessed relief—*in a hurry*—simply rub Absorbine Jr. on those stiff, aching spots.

Proved favorite

A stand-by for years with professional athletes, Absorbine Jr. goes to work the minute you apply it—with two wonderfully beneficial actions.

This famous liniment actually helps to *counteract* the pressure which may be causing your pain. At the same time, it warms and soothes. You start feeling better with surprising speed.

Don't let sore, aching muscles catch you unprepared. Get a bottle of Absorbine Jr. today. Sold at all drug counters. Used by thousands for quick relief of aching muscles, and of neuralgic and rheumatic pain.

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As modest in price as in the space it requires

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Do you need

Decorating help?

If you are thinking of redecorating, here are a few tips on how to get help

When most people think of an interior decorator, they get a mental picture of dollar bills floating out the window. Don't let that rumor of extra expense frighten you—because it is completely false! In fact, quite the opposite is true—for a decorator knows many moneysaving ideas you have never thought of. A decorator has a better knowledge of what is available and where to find things you might spend months looking for.

Types of decorating help: There are several kinds of decorators. One of the most useful to you is the one in a large department or furniture store who works on a commission basis. There is no charge for his service and he can sell you everything you will need—from rugs to wallpaper. The result to you will be a coordinated, color-schemed house that will be decorated to fit your needs.

Do have the consideration, however, not to ask a decorator on commission out to your house and then ask him what color to paint your walls. You are simply wasting his time and losing him money. If you have a simple problem about colors, or just want advice, go to one of the Home Planning Centers, or to a decorator who charges a fee for his service when he doesn't sell.

The locations of *Successful Farming* Home Planning Centers are starred on page 145 of this issue. At these stores you will find scrapbooks, pamphlets, and magazines for you to browse through for ideas. There are also color samples, rug samples, and fabric swatches. The consultant in charge will advise you about any problems and will go through the store with you if you are in doubt about what to buy. Furthermore, this is all free of charge.

When checking through magazines for ideas, try to broaden your thinking. You probably won't find a picture of something you can or would even *want* to copy exactly—but there may be several ideas you can *combine* to get just what you need. Even though you may not find any specific ideas that apply to your particular

Photograph: Hopkins

Director of *Successful Farming*'s Home Planning Center at Younkers, Des Moines, gives a customer some decorating help

problem, it always helps to have a general knowledge of the type of decorating being done.

The smaller decorating shops vary as to their methods of charging. Some work on a commission basis, others charge a fee for advice, and some do both. There are decorators who will hire the help needed to paint, wallpaper, or do carpenter work, and will supervise the work to see that it is done correctly.

The farm woman has a source of experienced help not to be found by the city woman. That is her local Home Demonstration Agent, who can give advice on color and furnishings.

What you can do to help: When you go to a Home Planning Center or a decorator, take along samples of your wallpaper, slipcover fabrics, a snip from the underside of your upholstered pieces, or of any color you plan to keep in the room. When you buy new things, always save a sample for this purpose. Also take along measurements of your room, including window and door placement and furniture arrangement.

A decorator needs your help in order to know what additions or subtractions will do the most for your room. Give him a definite idea of how much money you intend to spend and how many things you expect it to cover.

Questions your decorator will ask: A good decorator will ask you certain questions about the type of entertaining you do—whether you serve company with big sit-down dinners or prefer buffet "come-and-get-it" meals. He'll need to know how you spend a quiet evening at home, what kind of furniture you like, and your color preferences.

This information will help him make your home individual and suit your personality and needs. **END**

For busy spring months

Have plenty of HOT hot water

always on tap...

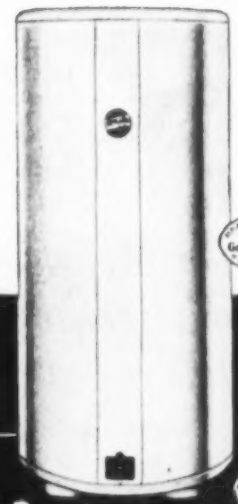
-buy White!

Buy two Whites . . . one for the barn and one for the house. Life is easier, profits higher with plenty of hot water for every farm and home need. Egg, chick, and pork production go up, and you save hours of work and worry in the dairy barn. *White* Water-Hotters are your best water-heating investment. *White's* 14 built-in quality features assure long years of trouble-free operation and economy. White Products Corporation, Dept. W-4, Middleville, Mich.

Guaranteed by Good Housekeeping

6.9% MORE HOT WATER than most utility requirements, in electric models, because White's exclusive Water-Hotter baffle diffuses, tempers incoming cold water.

FILM OF FLAME Single port burner in gas Water-Hotter means NO clogging ever. You get amazingly fast "pick-up" for PLENTY of hot water when you want it.



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Automatic Water Heaters

Electric or Gas

Make these smart Wardrobe extras

By Nancy Carpenter

Make your own "little hat." Stitch a jersey strip into a tube. Close one end, roll the other. Flip closed end over, add bright pin.

An extra collar gives the old suit a new lease on life. Make one yourself or buy it ready-styled. Use white pique or accent stripes.

Three yards of fabric make a smart after-five skirt. Use any full-skirt pattern, leaving an open seam at center front or back. Gay ruffled petticoat peeks through.

Drawings: Spurgeon

A belt wardrobe of webbing. It comes in lovely colors to flatter your skirts, basic dresses. Let a costume pin do the job of a buckle—or clip on gay artificial flowers.

Perk up your dark gloves with buttons covered to add a fresh touch. Use scraps of paisley, stripes, or bright-colored plain—key buttons to your wardrobe.

Best friend an old suit ever had! Make colorful new lining with blouse to match. (Use tie print or paisley.)

The Passion Flower

ITS LEGENDARY SYMBOLISM:

With its five stamens representing Christ's wounds on the Cross, and its center circlet resembling the Crown of Thorns, the Passion Flower recalls the Crucifixion. It is sculptured into the monuments featured on this page.

DESIGN NO. 3110

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"Here we are closest to each other. Here we as a family find renewed strength in reverence and remembrance. The quiet dignity of our family monument brings us memories of the past . . . faith in our inheritance . . . and courage for what lies ahead."

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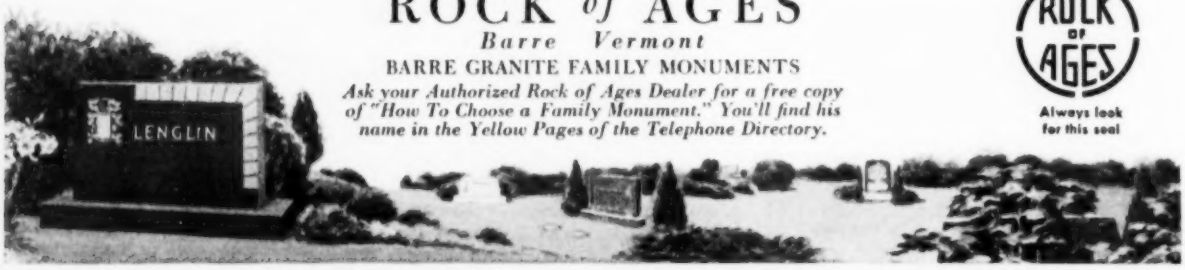
Ask your Authorized Rock of Ages Dealer for a free copy of "How To Choose a Family Monument." You'll find his name in the Yellow Pages of the Telephone Directory.

ROCK OF AGES

Always look for this seal



Livestock news

From page 121

Should healthy pigs get antibiotics?

Adding antibiotics to pigs' rations after weaning age may not pay if they're healthy. W. L. Robison, of the Ohio Agricultural Experiment Station, has four years' results to back this statement.

Robison found that pigs getting an antibiotic in a soybean oil meal ration in dry lot gained .1 pound more a day, and were ready for market 6 days earlier than pigs not getting an antibiotic. But feed saved was only 1 to 4.5 percent—just enough to pay for the cost of the antibiotic. Aside from getting hogs ready for market 6 days earlier, there was no advantage in feeding the antibiotic.

In other experiments with hogs on pasture, over the last 3 years, Robison also found that healthy hogs don't need antibiotics. Hogs getting an antibiotic in the ration didn't gain any more efficiently or rapidly than those hogs not getting the antibiotic.

In each experiment, says Robison, the rations fed were high in the B vitamins.

• • • •

Another angle on bloat

Corn-and-cob meal, fed in the evening, is the answer to the bloat problem in beef cattle fattened on pasture, says Milford Davis, farmer in southwestern Minnesota.

"We get the cheapest gains and make the best use of our land when we summer-fatten beef cattle on brome-and-alfalfa pasture, combining our grain ration with grass," Davis said. "But we had to learn how to deal with bloat before we felt secure in this system of feeding."

Davis explained that he adjusts his mill so that corn-and-cob meal comes out quite fine. Molasses in dry form put into the mill with the corn is ground into the cob sufficiently to make it stick.—*W. J. H., Minnesota.*

• • • •

Pigs stronger, heavier when antibiotic fed

Aureomycin has proved valuable in bred-sow rations at Purdue. Pigs born to gilts receiving 20 to 30 mg. aureomycin per ton of feed were .2 to .3 pounds heavier at birth, and more of them were stronger than pigs born to gilts getting only 10 mg., or no antibiotics.

The antibiotic didn't affect the *number* of pigs farrowed, nor did it seem to affect pigs weaned per gilt. But pigs from the gilts receiving 30 mg. antibiotic per ton of feed were stronger and more uniform in appearance at weaning.

There doesn't seem to be a carryover effect from the antibiotic fed to bred gilts or sows. That is, pigs from antibiotic-fed sows won't keep ahead of pigs from non-antibiotic fed sows—unless the antibiotic is added to the creep ration.

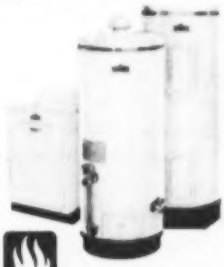
a 52 gallon table top water heater with enough capacity for every **HOT WATER** need

It's **HEATMASTER,** of course!

Here's HEATMASTER, the Electric Table Top water heater made in cabinet size with a capacity of 52 gallons! This C-E HEATMASTER is superbly finished in white enamel and equipped with a gleaming white, porcelain enamel top work surface. It's styled for complete harmony in the year's most modern kitchen. The Table Top is available, too, in 40 and 30 gallon capacities. Only HEATMASTER offers you such a complete selection.

You can see these newest Table Top water heaters through your nearest HEATMASTER dealer. He has been chosen by C-E as a HEATMASTER representative because of his skill and experience.

You'll find the HEATMASTER water heating line COMPLETE. There is exactly the right water heater for every home need... in table top or round models, equipped for use with electricity, city or L. P. gases.



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COMBUSTION ENGINEERING, INC., Water Heater and Soil Pipe Division, Chattanooga 1, Tennessee

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Test for safe water

From page 114

test your own water supply. Health authorities suggest that you put your well in a "safe" condition *before* making the test, since you'll be more apt to maintain a safe supply after the test.

To disinfect your water supply after drilling a new well or repairing the pumping equipment, you can get help on page 127, "How to disinfect your well."

If there is a problem relating to the sanitation of your well, you can get help by consulting your local or state health agency, county agent, vocational agriculture instructor, or state college.

Simple, low-cost

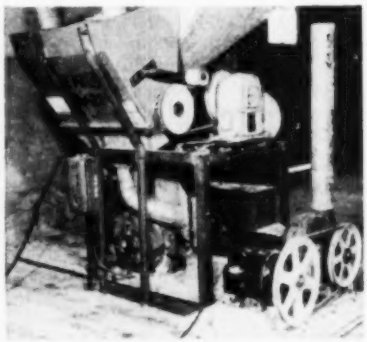
Automatic grinding

An automatic grinding installation—one which will handle straight ear corn and mix it with other grains and concentrates—has been developed by the Agriculture Engineering Department at Kansas State College.

Heart of the installation is a device which precrushes the ear corn and at the same time serves as a metering device to feed crushed corn evenly into the grinder. This not only permits use of a small electric motor (5 hp), but also makes it possible to mix the corn evenly with other grains or concentrates.

The grinder is mechanically controlled. The farmer needs only an off-and-on switch and an ammeter to show when the electric motor is running at rated load. The farmer can put together all parts of the installation with the exception of the hammer mill, motor, crusher, and blower.

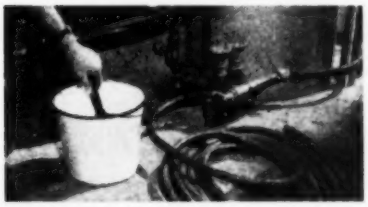
The unit will grind straight ear corn at the rate of 1,750 pounds per hour at a cost of less than a cent per 100 pounds. By building proper-size bins, the farmer could load the bins periodically and set a time clock which automatically would start the grinder. A blower can be set up to deliver the feed up to 300 feet away.



How to Disinfect your well

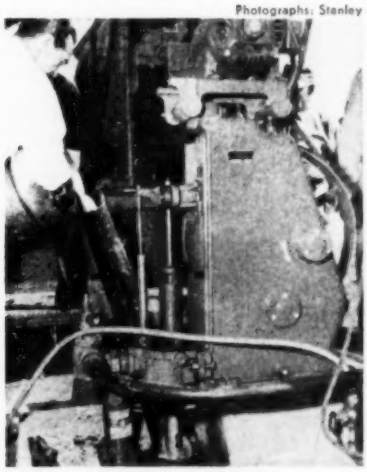
Well water for drinking purposes should be treated after well is completed or pumping equipment is repaired. Use ½ pound of chlorinated lime, 25 percent chlorine; mix with water. It's obtained at your drugstore

Pour 5 gallons of water with chemical, if well is small-casing type. If well is dug type, chlorinated lime may be poured directly into water. In meantime, remove all dirt, debris by a thorough pumping



Mix chlorinated lime and water thoroughly in preparation for pouring solution into well. Then pour into well, allowing it to flow down inside wall of casing itself

Photographs: Stanley



Pour in 10 to 15 gallons more water. Open *all* the water valves until you smell chlorine. Allow system to stand for 12 hours, then flush out pipes. Wait several days before taking test shown on page 114

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Let Sinclair EXTRA DUTY Motor Oil free your tractor's stuck rings and sticky valves—*then feel the new surge in pulling power.* This specially developed Sinclair Motor Oil has from 50 to 100% higher detergency to cleanse tractor, truck and car engines of varnish, sludge and carbon deposits. Moreover, EXTRA DUTY assures superior protection against all causes of engine wear – damaging friction wear – destructive acid wear and costly wear due to rusting. Get more power from your farm equipment—and *keep it* with new Sinclair EXTRA DUTY Motor Oil. Contact your Sinclair Representative, today.

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-SIOUX- Every year, -SIOUX- Steel storage demand far exceeds supply. Beat the rush, make big savings by ordering -SIOUX- Steel buildings, grain bins, and corn cribs now! Offer limited, so write us today for full details. (Dealer inquiries invited).

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Successful shortcuts

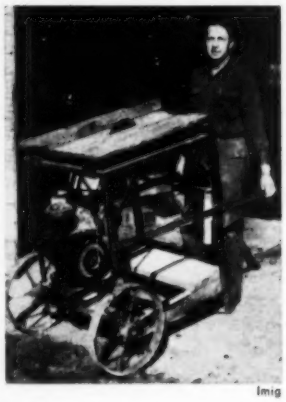
Build them yourself, save time and dollars

Tractor-mounted bale loader, built by Melvin Roth, Tazewell County, Illinois, delivers bales directly into wagon pulled behind the tractor. Loader is mounted on tractor with two bolts, runs off the tractor pulley. Morton built rig in his farm shop

Bill

Photograph: Wettach

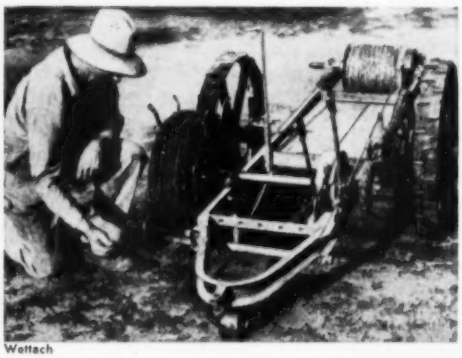
Portable gas engine is used by Art Hudachek, Muscatine County, Iowa, for odd jobs all around the farm. Strap-iron handle bolted to cylinder-head bolt makes it easy to carry the plank-mounted motor



Imig

Portable table saw saves lots of time for Clarence Weber, of Iroquois County, Illinois. Wheels were taken from a discarded gasoline engine, can be removed for sawing.

Power for the saw comes from a 2½-hp air-cooled motor, mounted on a platform under saw blade. Motor is detached for other jobs.

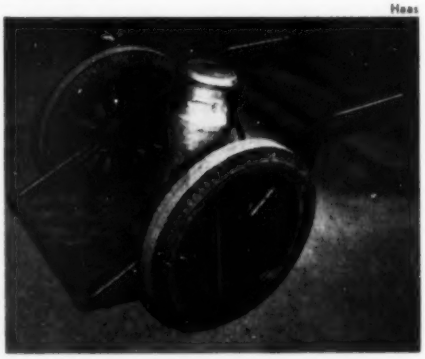


Wettach

Barbed-wire cart unwinds new wire, rolls up old wire on one trip across the field. Art Hudachek, Muscatine County, Iowa, built this rig from a corn-picker, grain binder, and angle iron. Platform holds extra wire.

Wire is level-wound on front reel. Clutch and brake on reels keep wire from overrunning.

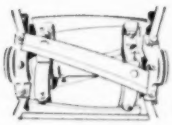
Hess



A two-wheeled push cart does away with man-handling feed or milk cans for Clare Mock, Burr Oak, Michigan. Cart will handle four 10-gallon milk cans or five sacks of feed.

Discarded automobile wheels are fastened to angle-iron frame. Platform is made of planks, handles of pipe. One man can operate the rig.

A HARVESTER FULL OF ADVANTAGES . . .



Sharp-shear Cylinder Cut. Helical cylinder has a scissors-like cutting action that cuts uniformly with a saving in power. Length of cut easily adjustable from ⅜ to 4 inches.

•

Easily Controlled from Tractor Seat. Levers are adjustable—convenient to reach from any tractor. Feeder control lever lets you stop or reverse feeder instantly—reduces clogging.

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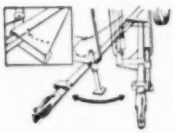

Swinging 5-Position Drawbar places the harvester behind the tractor for convenient transport—easier to pull through narrow gates. Adjustable for all operating conditions.

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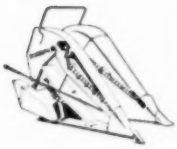


Quickly Changed to Row Crop Unit—gets under "down" and tangled stalks—cuts clean and close. Row crop and pickup gathering units sold separately—buy only what you need.

31 HP engine or PTO drive • Big capacity blower • 4 cutting edges on shear bar • Pivoting spout for side or rear delivery • Adjustable spout deflector • Easily adjusted knives Sealed gear box runs in oil.

SAVE YOUR HAY CROP

Rain or Shine

Count back through the seasons when your hay crop was ruined by wet weather—and the worry of a feed shortage that usually followed. Probably you had thought many times: "If only this pasture-rich hay could be saved!"

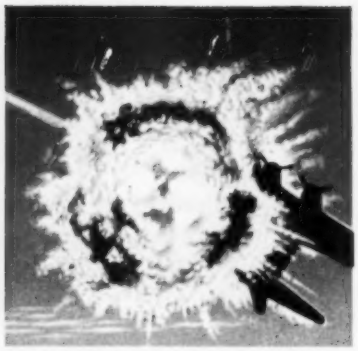
Today, many farmers *are* saving their hay crop in wet weather by making grass silage with the Dearborn Forage Harvester. They find this light-pulling field cutter works well in soft fields, and has plenty of power to quickly chop and load heavy green forage as well as hay and straw.

It's a time and work-saver, too. With one or two helpers, you get the job done quickly—handle up to 15 tons per hour without heavy lifting. Of course, there are many more advantages, and your nearby Ford Tractor Dealer will be glad to discuss them with you. Tractor and Implement Division, Ford Motor Company, Birmingham, Michigan.

Thoroughly tested and approved by Ford agricultural engineers and specialists. Dependable parts and service through your Ford Tractor Dealer.

Ford Farming MEANS BETTER WORK . . . MORE INCOME PER ACRE

Dearborn Forage Harvester



Drawings based on high speed motion pictures show Nike's missile destroying a pilotless bomber in test at the Army's White Sands Proving Ground, N. M.

Winged Victory... product of telephone wizardry

This is the story of NIKE (ny'key)—named after the Winged Goddess of Victory of ancient Greek mythology.

But today's Nike is no myth! It's one of Uncle Sam's most fantastic new defense weapons—proved in tests and now being delivered to the Army by Western Electric, maker of your Bell telephone.

Nike is the first system in production for keeping anti-aircraft guided missiles under constant automatic control from the ground, enabling them to track down and destroy any existing type of plane, regardless of its speed, no matter how high it flies, what evasive action it takes.

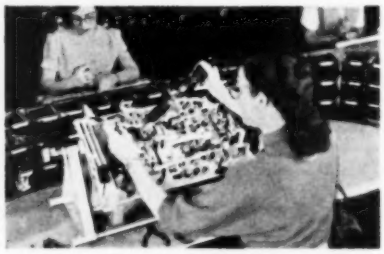
You'd find Nike's brain filling several large vans with complex electronic equipment. Signaled by an air warning net that hostile planes are approaching, Nike picks up the target and tracks it electronically. With incredible speed and accuracy, Nike pinpoints a plane's position—tracks it relentlessly—tells when to launch the missile—follows the missile's flight—and guides it to the target at supersonic speed. Then . . . *the kill!*

Inside central control van, these soldiers watch radarscopes as Nike automatically guides a missile to its target.

Such a weapon may seem wholly unrelated to your familiar friend the telephone—which doesn't look complex. But the telephone you hold in your hand is connected with a maze of intricate mechanisms in which electronics plays a mighty part.

Special skills and techniques developed jointly by Western Electric, manufacturing unit of the Bell System, and Bell Telephone Laboratories, our teammate in creating the nation-wide telephone network, were just what were needed to transform Nike from an idea to a combat-ready reality.

Working closely with Bell Laboratories, the Army, Douglas Aircraft (which is responsible for the missile itself), and with hundreds of sub-contractors, Western Electric has applied its unique ability in electronic technology to producing a mighty weapon of defense. In this achievement, Western Electric—like all the Bell telephone companies—is continuing to carry out the Bell System's guiding principle: *"Service to the Nation in Peace and War."*



A Western Electric girl assembles one of the more than 300 "brain cells" that guide a Nike battery's missiles.

Principal units of Nike anti-aircraft guided missile system are shown here grouped in front of Western Electric test building.

Western Electric

A UNIT OF THE BELL SYSTEM SINCE 1882

Santa Gertrudis—

they can take Midwest winters

By D. Howard Doane

To find out how Santa Gertrudis cattle would stand Midwest winters, and also to try two different wintering methods, I brought a load of this comparatively new breed to my farm near Columbia, Missouri. Thirty-three head reached Grassland Farm on April 25, 1952. The farm weight was 431 pounds. These calves had been taken off the cows just a short time before shipping. The calves averaged about 6 to 7 months old.

During the last half of April, I turned the Santa Gertrudis, along with some other cattle, on a 40-acre field of grass and clover. They were taken off and moved to another pasture on June 13.

I considered the pasture season at an end on November 26. The 1952 summer weight gain averaged 371 pounds per steer. After taking the cattle off pasture, I divided the group. Ten head, weighing an average of 803 pounds, were turned back to pasture and left out all winter with only natural shelter—no buildings. Three head of white-faced cattle were run with them to serve as comparisons.

We had a very favorable winter. Cattle were given hay only when snow and ice covered the ground. These roughed cattle received only 200 pounds of hay per head. The hay cost $20 a ton and the direct labor charge against the steers was 70 cents. Total out-of-pocket costs for the winter amounted to $2.70 a head.

Twenty-three head of Santa Gertrudis, weighing 801, were fed corn silage, hay, and some cake at the same time the other 10 head were being roughed through the winter. I figured silage at $10, hay at $20, and cake at $88 per ton. This made a winter feed bill of $31, and a labor bill of $6.83 per head for the winter. This bunch had two white-faced cattle with them to serve as checks.

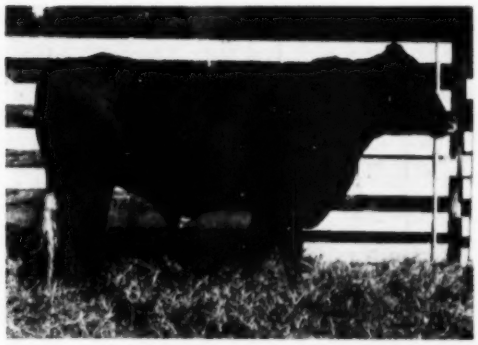
On April 11, 1953, both lots of cattle were turned to grass, and then I calculated wintering results.

The *roughed-through* Santa Gertrudis lost an average of 40 pounds per steer during the winter. The *roughed-through* white-faces lost an average of 70 pounds per steer. The *fed* Santa Gertrudis averaged 100 pounds gain per steer. The *fed* white-faces averaged 108 pounds gain per steer.

The summer and fall of both 1952 and 1953 were bad drouth years—1953 the driest in our history. It is difficult to understand how cattle could have made any gains, but here is the record.

The Santa Gertrudis steers which had been *roughed* through the previous winter averaged 2.01 pounds gain per head per

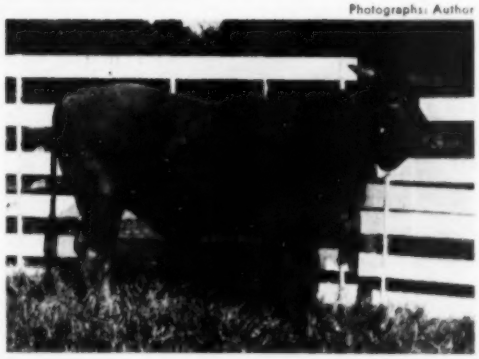
[*Turn to page 132*



Fed steer got corn ensilage, hay, and a little cake. Total out-of-pocket cost for wintering this steer was $37.83.

This steer weighed 1,190 pounds when sold in late September for $14.50. The steer was graded Low-Good or High-Commercial.

Photographs: Author



Roughed steer was fed only pasture plus a little hay when snow or sleet covered the ground. Total out-of-pocket cost for wintering this roughed steer was $2.70.

The steer weighed 1,025 pounds when sold for $14.50. This steer was graded Low-Good or High-Commercial.

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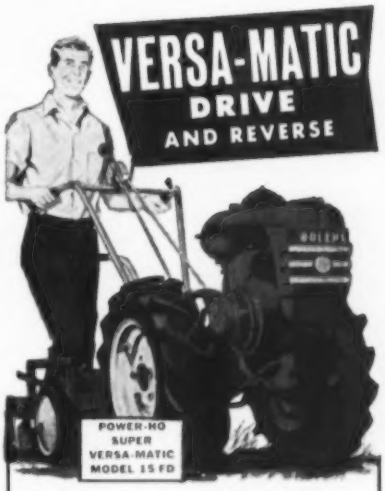
BOLENS NEW 1954

POWER-HO

GARDEN TRACTORS

featuring amazing



With this one-lever Versa-Matic control, a Bolens owner can choose any desired forward speed or reverse, without shifting, clutching or belt changing. All at full engine governed speed with no throttling down and loss of power. If operator releases handle when in reverse, tractor automatically goes into neutral—a great safety feature . . . Bolens offers 3 other Power-Ho Models Too!

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BOLENS HANDI-HO — BOLENS RIDEMASTER — BOLENS GARDENER

YOUR BOLENS TRACTOR WITH ATTACHMENTS WORKS THE YEAR 'ROUND

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I am interested in literature on:

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Plastic Pipe today must meet your needs tomorrow

"I've studied this problem thoroughly, son. This Yardley water system pipe will not only pay off right now . . . but will save costly replacement in the years ahead."

Only Yardley ClearStream Farm Water System Pipe is PressuRated

Now you can be sure of a uniform safety factor in every foot of your cold water lines. Yardley *ClearStream* Pipe for farm use is now *PressuRated* at 75 lbs. working pressure for all six sizes — ½" through 2".

Ordinary plastic pipe is made in metal-pipe wall thicknesses. As a result, one size might be rated at 100-lb. pressure — another size only 30 lbs. With *ClearStream PressuRated*, every size is the same.

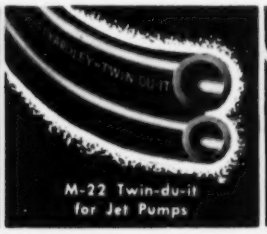
Regardless of your present pump pressures or size of the water system, use the only plastic pipe designed for present and future needs. *ClearStream PressuRated* is a better long-term investment — and in some cases costs less now than before. Also made in 100 and 125-lb. pressure ratings.

Guaranteed 100% pure virgin Polyethylene; weighs ⅛ as much as steel; can be installed in a matter of minutes with a few simple tools; never rots, rusts or electrolytically corrodes. Uniform fittings for all sizes. Available through your dealer in standard lengths and in boxed 100-ft. coils.

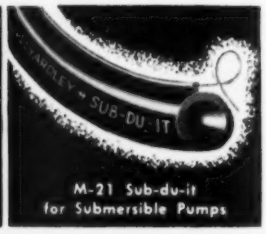
Look for the pressure rating and the *ClearStream* name stamped on every length. For service lines or pump pipe, insist on *ClearStream*. Send for literature.

SPECIFICALLY DESIGNED FOR EVERY COLD WATER USE

PressuRated Pipe in Handy 100 ft. Cartons



M-22 Twin-du-it for Jet Pumps



M-21 Sub-du-it for Submersible Pumps

YARDLEY PLASTICS CO., 142 Parsons Ave., Columbus 15, Ohio

In Canada: DAYMOND CO., LTD., Chatham, Ont. • Export Sales: F. & J. MEYER, 115 Broad St., New York 4, U.S.A.

Santa Gertrudis

From page 131

day for 168 days on pasture. The white-faces *roughed* through the previous winter averaged 1.88 pounds per head per day.

The Santa Gertrudis *fed* through the previous winter averaged 1.44 pounds gain per head per day for 168 days on pasture. The *fed* white-faces averaged 1.27 pounds gain per head per day.

The roughed cattle were 138 pounds lighter than the fed group when they all went to pasture on April 11. On September 26, the difference was only 42 pounds. In other words, the roughed cattle made up 70 percent of their difference from April 11 to September 26. Both bunches grazed together during the summer. No feed outside of pasture was fed.

The Santa Gertrudis—both roughed and fed—were marketed soon after the September weighing. They sold together for $14.50 a hundred direct from grass with no dry-up or fill. Using the farm weights, we have these figures for the Santa Gertrudis:

	Roughed	Fed
Home weight just before shipping	1,102	1,144
Home value at $14.50 per cwt.	$159.79	$165.88
Wintering cost, feed, and labor	2.70	37.38
Difference	$157.09	$128.50

If pasture is counted as part of the wintering cost, we would have different figures, of course. With winter pasture for roughed cattle at 5 cents a day for 197 days, and 15 days of rye pasture for the fed cattle at 15 cents a day, here are the figures:

	Roughed	Fed
Value, home weights	$159.79	$165.88
Winter feed, labor, pasture	12.55	39.63
Difference	$147.24	$126.25

The figures shown as "difference" should not be confused with "profit." Only out-of-pocket costs for harvested feed and labor are shown in the tables.

When the cattle were sold, the packing-company buyer was told to cut and price the cattle on their merits. When he attempted to do it, he cut just as deeply into the fed bunch as he did the roughed lot. He finally gave up and said, "Under normal buying, these cattle would all sell together."

As a result of this wintering test, I am sure that Santa Gertrudis cattle *can stand Midwest weather without harm*. Also, as a result, I am convinced that the difference between grain- and grass-fed cattle is very slight if they are both *finished to the same degree*. Taste tests on the two types have shown no significant differences. **END**

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QUICK CHANGE

...To Chop Crops at Their Nutritious Best

DAILY GREEN FEEDING

Cutter-bar unit makes daily harvesting of lush, high-protein grasses and legumes for feeding livestock an easy, fast, one-man operation at low cost.

PALATABLE HAY

Windrow pick-up unit handles big, heavy windrows of hay smoothly and gently for chopping into easy-to-store, easy-to-feed, easy-to-eat lengths.

SUCCULENT SILAGE

Row-crop unit gobbles up high-tonnage corn, sorghums, or other row crops for money-making, economical feed, on which livestock thrives.

Whatever your system of harvesting hay, silage or green feed, you can bank on the Case Forage Harvester to cut costs every time it chops crops. Without help and very little effort, you change units in just a few minutes to put up any forage at its best stage of growth for protein, vitamin and mineral content. And—while it's working you'll marvel how light-running it is . . . how it takes full advantage of tractor power, whether 2-plow or up to 5-plow. Actually, its capacity is limited only by the number of wagons, distance to haul and unloading equipment you have. You've got to try this machine to find out how and why it saves power while cutting extra tons every hour . . . how its simple design and strong construction assure efficient, trouble-free performance.

YOU USE ONE BASE MACHINE, whether Long-Cut or Standard Model, to chop hay, grasses, legumes, corn or straw into accurate lengths from less than ½-inch to 3 inches or more—for silage, barn curing, dry storage or bedding. Just wheel the unit you want into place, tighten three bolts and go.

NEW CASE FORAGE BLOWER

Has the capacity and handy features to keep up with the fast Case Forage Harvester. Spring-balanced hopper raises for truck to drive in—no backing. Call on your Case dealer now for demonstrations.

MAIL FOR FULL FACTS

Check below or write on blank line any farm machine or tractor that interests you. Send to J. I. Case Co., Dept. D-774, Racine, Wis.

☐Long-Cut or Standard Forage Harvester
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Clarence W. Koester

Rt. 1, Hartland, Wisconsin Says:

"We're delivering better milk with less work"

with the CO-OP Universal SHORT TUBE MILKER

Read what Mr. Koester has to say about his UNIVERSAL Short Tube Milkers:

... they're fast,—the cows seem to 'let down' more freely. We now milk 37 cows in 55 minutes with 4 units. The Calf-Nose Inflation...has practically eliminated hand stripping, and we've had no udder trouble all year. Pulsator stays on tight, yet comes off easy for quick cleaning—one reason for our low bacteria count.

I'd say the Universal Short Tube is the best reason why we're delivering better milk with less work.

Sincerely yours,

Clarence W. Koester

(Excerpts from a letter on file.)

Dairymen everywhere are proving the Short Tube Milker one of the greatest aids to improved milk quality — at less labor. The New Milker Lid is one important reason. Protects the milk from vacuum line condensation and contamination, and acts as a positive baffle to keep milk out of the vacuum tube. New friction gasket holds pulsator securely. Yet it is simple to take off for cleaning.

Let the UNIVERSAL SHORT TUBE MILKER help you to deliver better milk — at higher profits. Ask your CO-OP UNIVERSAL Dealer about it.

"WHAT TYPE OF MILKING MACHINE SHOULD I GET?"

That's the title of a free booklet — the only one of its kind. Write for your copy.

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AMERICA'S FINEST DAIRY FARMS CHOOSE UNIVERSAL

Asphalt holds waterway—

until grass takes over

Asphalt may soon be used to tie down wandering soil.

At the University of Wisconsin, emulsified asphalt was used last fall to hold loose soil on a newly constructed waterway until grass could grow through and become established.

The waterway was constructed early in September. After seeding, a tank truck sprayed the waterway with a light coat of asphalt heated to 125 degrees. The asphalt formed an open, honeycomb layer over the soil. Complete results of the experiment will be checked before the practice is recommended for general use.

Photograph: University of Wisconsin

Successful Farming's practical up-to-the-minute information will help you and your family enjoy better farm living.

The average value of farm Implements and Machinery of Successful Farming farms is nearly double the U. S. farm average. Write for classified advertising details.

County agents, vo-ag teachers

"How to build fence"—a problem on every farm.

To help you answer the many questions on building fence, *Successful Farming* has collected the newest and best ideas on the subject and made them up in a black-and-white film strip. Included are sections on basic fencing principles, problem fences, temporary fences, and gates.

A 35-mm. single-frame type of film-strip projector can be used for showing the film. This film is especially adapted for showing at extension meetings and to vocational-agriculture classes.

This film strip—along with an easy-to-use commentary on each of the 43 frames—is available at once. To get the strip, entitled, *How to build fence*, send $3.50 to *Successful Farming*, 1716 Locust Street, Des Moines 3, Iowa.

Scouring pigs? Diarrhea? Stop scours fast with new Terramycin Animal Formula.

Prevent scours in newborn calves. Mr. H. C. Rose, Rossville, Ind., writes, "We control calf scours with Terramycin. To date I have not seen even a trace of the disorder, which in the past was my most costly problem."

New 2-day Treatment for Calf and Pig SCOURS

EASY ANTIBIOTIC TREATMENT FOR SCOURS, ENTERITIS, PNEUMONIA, SHIPPING FEVER, SEPTIC INFECTIONS

- ***Scored tablet:*** Easy to break in half for small dosages.
- ***Easy to use:*** No mixing. No measuring. No equipment needed.
- ***Simplifies treatment:*** Terramycin, given by mouth, is quickly absorbed, gives sustained drug action. Fight Pneumonia, Shipping Fever this easy way.

Here's the new Terramycin Animal Formula Tablet. It contains the wonder-working antibiotic Terramycin to stop costly calf and pig scours.

No other antibiotic is effective against more animal diseases and possesses activity against more disease-causing organisms than Terramycin. So save buying medicine twice. Always get Terramycin first.

Now, combat Infectious Scours and Diarrhea in pigs and calves with the wonder-working antibiotic Terramycin in a handy, easy-to-use form —new Terramycin Animal Formula Tablets.

Quick-acting Terramycin hits directly at a wide range of dangerous bacteria in the digestive tract of scouring calves and pigs—often clears up Infectious Scours and Diarrhea in as little as two days!

New Terramycin Animal Formula Tablets are administered by mouth, making treatment extremely simple. There's no mixing. Nothing to measure out. No equipment necessary.

Get new Terramycin Animal Formula Tablets at your Animal Health Headquarters today.

New, easy-to-use, wonder-working

Terramycin®

BRAND OF OXYTETRACYCLINE

ANIMAL FORMULA

TABLETS

Effective treatment of disease requires prompt, accurate diagnosis. Always consult your Veterinarian.

Look for this handy, 2-tablet matchbook package at your Animal Health Headquarters.

Pfizer

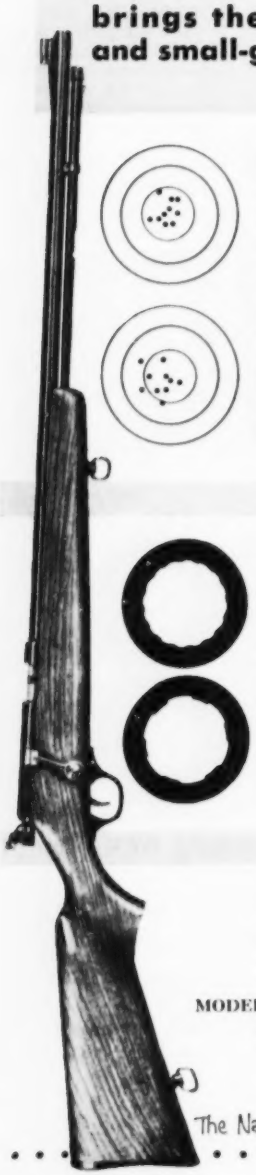
Chas. Pfizer & Co., Inc., New York

World's Largest Producer of Antibiotics

-and now in *Marlin* bolt action .22's!

MARLIN'S SENSATIONAL MICRO-GROOVE RIFLING*

brings the most accurate plinking and small-game shooting ever known!



PROOF! Two typical 10-shot patterns fired at 100 yards by a noted gun editor and marksman. Note *(at top)* tight group from a Marlin .22 with revolutionary new Micro-Groove Rifling—exclusively Marlin's. Note wider dispersion of bottom group, fired from new .22 of famous make with regular rifling. *Two years of intensive firing with guns equipped with Marlin Micro-Groove barrels shows increases in accuracy of 20% to 25%!* Micro-Groove Rifling was perfected by T. R. Robinson Jr., Marlin's famous Director of Research and Development—and is available only in Marlin Guns.

HERE'S WHY: Note that Micro-Groove Rifling *(top)* has SIXTEEN . . . SHALLOW . . . grooves as compared to regular rifling *(bottom)* with SIX . . . DEEP . . . grooves. Easy to see why Micro-Groove means faster, more even dissipation of heat through the barrel . . . far less gas leakage, too—a major cause of bullet "flipping" at the mouth of the barrel. Far less barrel erosion, too. Also—Micro-Groove avoids deep scarring of the bullet, thus lessening wobble and air resistance, which cause inaccuracy.

See Marlin Micro-Groove at your dealer now. Available in all Marlin bolt actions, as well as semi-automatics. Same models offered also with Marlin's long-famed Ballard type rifling.

MODEL 81-DL, $30.95. Full tubular magazine takes short, long and long rifle .22 cartridges. Other Marlin .22 bolt actions from $24.95. Prices slightly higher west of Rockies.

**Trademark and Patent Pending*

The Name For Game *Marlin* Fine Guns Since 1870

VALUABLE COUPON —MAIL TODAY!

The Marlin Firearms Co.
Dept. 4-9F, New Haven, Conn.

Send me catalogue with information and photo-illustrations of Marlin Guns, plus new cartoon booklet, *"More Fun with Your .22 Rifle."* Also send me a pack of (check preference) ☐ single or ☐ double-edge Marlin Razor Blades. I enclose 10¢ for handling.

NAME _____

STREET _____

CITY _____ ZONE _____

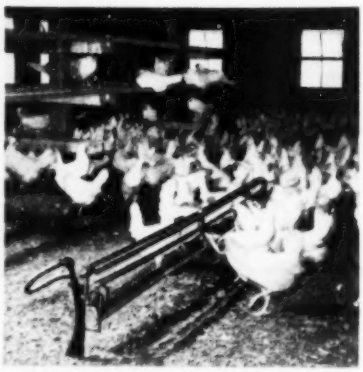
STATE _____

He handles 5,000 layers alone

From page 60

has gradually increased his henhouse capacity by remodeling several unused buildings. Several old buildings were remodeled into two 3-story poultry houses. Recently, Nettleton remodeled an old dairy barn into a modern laying house. Two new floors were added to this building, giving it a capacity of 2,600 layers.

The laying flock is the main source of income on the Nettleton farm. As such, it gets the needed attention to make it a profitable farm enterprise.



Automatic watering system supplies water to pens. A soil-heating cable, thermostatically controlled, prevents freezing

Automatic egg grader sorts eggs (1,500 per hour) according to size. Graded eggs are sold for a premium to local egg buyer

Nesting room, located in corner of each laying pen, speeds egg pickup job. Community nests are used. Rooms are dark. END

Easy mover for hoghouses

By Ray E. Armstrong
Iowa State College

Make each side member with 2 channel irons welded together, top and bottom. Pipe is welded in holes. Channels are 1½' longer than the house

The problem of maintenance for 160 movable hoghouses at Iowa State College's Ankeny Field Station was solved by constructing the trailer shown here. Agricultural engineers designed it for moving individual hoghouses to clean pastures over graveled roads and sandy soils—conditions that wear out runners rapidly. You can use the same idea.

The carrier can be built largely from salvage material in a farm shop equipped with a welder and a few power tools.

A 1½-ton winch raises house with ½" wire cable running in pulleys. Platform for winch and tongue is angle iron, steel strap

To raise house, pipe 1' longer than house is placed inside each runner and hooked to cables at each end. Winch has ratchet lock

Photographs: Fletcher

Oshkosh B'gosh

FOR OVER 50 YEARS KNOWN
TO MILLIONS AS THE
WORLD'S BEST WORK WEAR

Yours for tops in comfort, good looks and money-saving extra wear in

Coats—Coveralls—Work Pants and Shirts, also Western Style BRONKS for Men, Boys and Girls

OSHKOSH B'GOSH, Inc.
Oshkosh, Wisconsin

STOP PAIN INSTANTLY

COMBAT INFECTION PROMOTE HEALING

WITH ANTISEPTIC

Campho-Phenique

(PRONOUNCED CAM-FO-FIN-EEK)

USE IT FOR

MINOR BURNS, CUTS SCRATCHES, ABRASIONS

Quick! Apply Campho-Phenique at once to minor burns from hot cooking utensils, hot water or steam . . . stops pain *instantly*, promotes rapid healing. The same thing happens when you use it on minor cuts, scratches and abrasions. Campho-Phenique is highly antiseptic. Wonderful for fever blisters, cold sores, gum boils; to relieve itching and to guard against infecting insect bites. Used on pimples, Campho-Phenique helps prevent their spread and re-infection.

Night Coughing Quickly Relieved by Home Mixture

Saves Big Dollars. No Cooking.

This splendid recipe is used by millions because it makes such an effective medicine for coughs due to colds. It's so easy to mix—a child could do it.

From any druggist get 2½ ounces of Pinex, a special compound of proven ingredients, in concentrated form, well-known for its soothing effect on throat and bronchial irritations.

Then make a syrup with two cups of granulated sugar and one cup of water. No cooking needed. Or you can use corn syrup or liquid honey, instead of sugar syrup.

Put the Pinex into a pint bottle and fill up with your syrup. This makes a full pint of cough medicine, very effective and quick-acting, and you get about four times as much for your money. It never spoils, and children love its pleasant taste.

This cough syrup takes hold of coughs, giving quick relief. It loosens phlegm, soothes irritated membranes, helps clear air passages. Money refunded if Pinex doesn't please.

FOR EXTRA CONVENIENCE GET NEW READY-MIXED, READY-TO-USE PINEX!

THE PINEX CO., FORT WAYNE, IND.

Hand Wrought Iron
MAIL BOX POSTS and "SCOTCHLITE" NAME PANELS
Big Selection—FREE *Catalog*
WRITE DEPT. S-F (Retail Only)
JO-VON INDUSTRIES BOX 1285 · TOLEDO OHIO

Many blouses —one pattern

It's smart to sew a blouse wardrobe from one good-fitting basic pattern. Here are five versions of Advance Pattern 6609. The trick is simple—long, short, or no sleeves; with or without collar; fabric contrast; ruffle or ribbon trim.

Sissy shirt. Make the basic shirt in sheer fabric. Add matching fabric ruffle on the collar, cuffs, and front closing

Vested blouse. Create vest effect with plain fabric body, print sleeves. Same pattern pieces in one material make the standard shirtwaist blouse

Suit companion. Make a short-sleeved version to wear under suits. Brighten sleeves, collar, and front closing with gay, embroidered ribbon

Versatile favorite. Finish neckline without collar as background for soft scarves, bright pins, pearled throat. Use long sleeves for drama

Drawings: Spurgeon

Sleeveless cooler. Omit sleeves, add pert neckline corsage. Best for summer in crisp cotton as a neat topper for colorful, swirling skirts

Advance Pattern 6609 available from local dealers or may be purchased direct from Successful Farming, *2204 Meredith Building, Des Moines 3, Iowa. Sizes 12-18. 35 cents.*

Dollar for Dollar You Can't Beat a Pontiac for '54

Front Door Fashion . . . Rough Road Reliability

Pontiac is alone among low-priced cars in its unique ability to combine distinctive beauty with long-range dependability and economy. Pontiac is big and handsome, with interiors that compare with the finest in roominess and luxury. Its long wheelbase hugs the road and cradles you in big-car comfort. It steers and handles like a dream, and with its husky high-compression engine Pontiac takes to the back roads with sure-footed confidence. And road records prove that no car has a longer, more care-free life, remarkable for its economy of operation and maintenance. See and drive the magnificent Star Chief and the beautiful Chieftain, both available, with Dual-Range Hydra-Matic Drive, Power Steering, Power Brakes, Comfort-Control Front Seat and Electric Window Lifts at modest extra cost.

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PONTIAC MOTOR DIVISION OF GENERAL MOTORS CORPORATION

Peebles' supplies the WHEY FACTOR for fast growth, better feathering

FEED Peebles' whey nutrients now to speed chick growth, promote feathering and reduce cannibalism (picking). Peebles' is a daily flock conditioner that supplements your regular feeds. It promotes better intestinal health, keeps birds eating and drinking during changeable weather — and throughout periods of medication.

Peebles' supplies high concentrations of the Whey Factor for added grow power . . . and extra eggs from your laying flock. Get Peebles' from your local dealer in 10-lb. HANDI-PAKS for baby chicks and regular 50-lb cartons. Your birds help themselves right from the weather-resistant containers.

Write Appleton, Wis., for free folder B-4: "The Whey Factor Adds Grow Power."

Peebles'
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You get more for your classified advertising dollar in Successful Farming. It's better read by better farm customers. Details on request.

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KRUGER Pistols *Wholesale!* $3.00 post paid

.12 CALIBER

FIRED BY .14 MG. POWDER CHARGE

Crafted after famous German Luger design. Not an air or CO_2 gun. This is a small bore gun that actually shoots .12 caliber lead bullets fired by .14 mg powder charge. Beautiful gun . . . ideal for target shooting. 4" steel barrel. Overall length 8¾". This amazingly low price is due to small bore gun design, direct factory-to-you sales. Comes with 50 bullets. Send for extra bullets or available at stores. Money back if not satisfied.

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Poultry

Now—break broody hen with a hormone

A female hormone, diethylstilbestrol, is now being used to break up broody hens.

It is sold in paste form and is administered with a gun in the meaty part of the breast. Most hens are back on feed 24 to 48 hours after treatment.

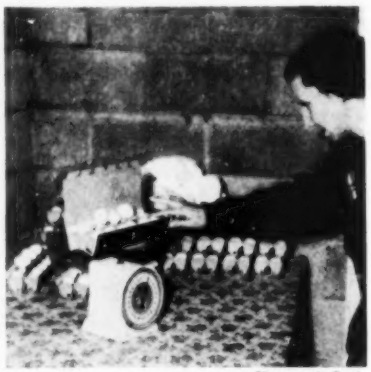
Researchers at Cornell University found it did a good job getting the hens off the nests. However, they haven't had enough experience to know just how long it takes for the hen to come back into production. It is important to use the hormone soon after the broody hens start to set.

• • • •

Sells eggs by weight—customers like it

Leonard Graham, Princeton, Iowa, has no trouble getting rid of pullet eggs. He sells them on a weight basis.

A "dozen" eggs may have 15 eggs (see picture below) in it if the eggs are small. Eggs are marketed on the basis of a dozen large eggs, or their equivalent in weight.



Photograph: Davis

"Customers like this system once they get used to it," says Graham. "They are reluctant to accept the system at first, but they like it once they are convinced that they are getting their money's worth. Getting 15 or 16 eggs for the price of a dozen usually sells them on the idea."

• • • •

Broiler business needs year-round hatching eggs

The growing broiler industry has opened a year-round market for hatching eggs. As a result, egg producers are starting chicks during the fall and early-winter months.

Special care is needed in handling these off-season chicks, according to Q. B. Kinder, poultryman at the University of

pointers

Missouri. Problems facing the poultryman are early sexual maturity, small egg size during the summer months, and an early-fall molt.

Here are some ways of offsetting these problems. Give the chicks a good starter ration but without the added stimulus of antibiotics or extreme high-energy rations. Artificial lights help offset the usual response made with increasing daylight hours in the spring.

Once the chicks reach 3 or 4 weeks of age, limit all-mash feeding and start feeding oats. Change to a growing ration at 6 weeks of age. Continue feeding oats. Many growers feed what oats the chicks will clean up in 3 to 4 hours, both morning and evening. Add some whole corn at 10 to 12 weeks of age.

The delay in sexual maturity which results from such management will give the needed increase in egg size and will help prevent the early-fall molt. However, it may increase the cost per dozen eggs.

• • • •

Deep feeders more than pay for their extra cost

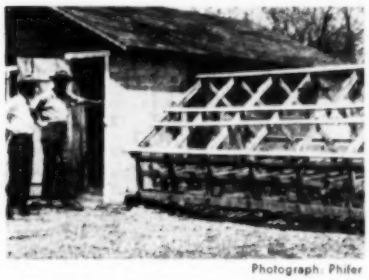
Operators of the Kimber Farms in Alameda County, California, found out for themselves just how much better a deep feeder is than a shallow one. They tested four different sizes of feeders, ranging from $2\frac{1}{2}$ to $4\frac{3}{8}$ inches in depth, and varying in width from $3\frac{1}{4}$ to $6\frac{3}{4}$ inches.

In their tests, the deepest and widest feeder saved feed at a rate of more than 8 pounds per bird annually, compared to the shallowest and narrowest feeder.

• • • •

Use range shelter for a sun porch

Make your range shelter do double duty this spring by pulling it up alongside the brooderhouse. Remove the roof to allow the sun to shine in. (See picture.)



Photograph: Phifer

Stretch chicken wire between the edge of the roof and the first runner to keep the chicks in and predatory animals out. When ready to move the chicks to range, just drive them into the shelter.

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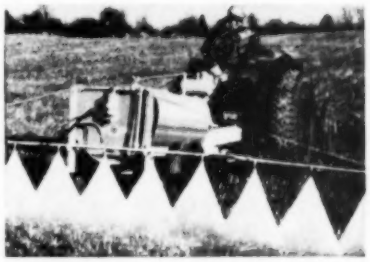
Pests move out!

Control Both Weeds and Insects Economically with a Low Cost, Multi-Use Myers Sprayer



Myers General Purpose Sprayer

With built-in automatic pressure regulator, the GP can be adapted for nearly every farm-spraying job. Fitted with a high-pressure gun, it's ideal for spraying livestock. It can be used for spraying weeds and brush, too, after a quick change from gun to boom and a decrease in pressure.

New Myers Mighty Mite

With a 13-gallon-per-minute capacity and a wide range of pressures, this low cost unit can handle most field, fence-row and right-of-way spraying jobs. The Mighty Mite is easy to attach to a tractor and just as easy to detach. Extra equipment includes a gun for stream or broadmist spraying.

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Equally important, you get *better bales* with a John Deere . . . for feeding *or* selling. Bales are wire-tied to stay tied through handling, hauling, and in high stacks . . . sliced for easy feeding . . . square-cornered for easier stacking. See your John Deere dealer for complete details, or write for free literature . . . soon!

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Tree surgeon

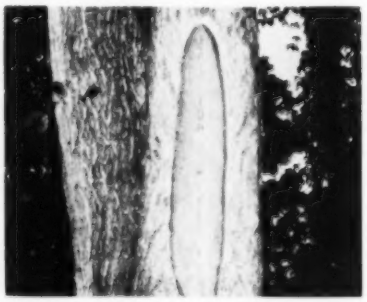
Broken limbs or lightning burns may leave a raw wound in one of your best shade trees. Prompt repair of the spot will prevent further damage to the tree.

Any time after the tree is in full leaf is suitable for surgery. Play safe by waiting until May 15 for most varieties.

Photographs: Russell

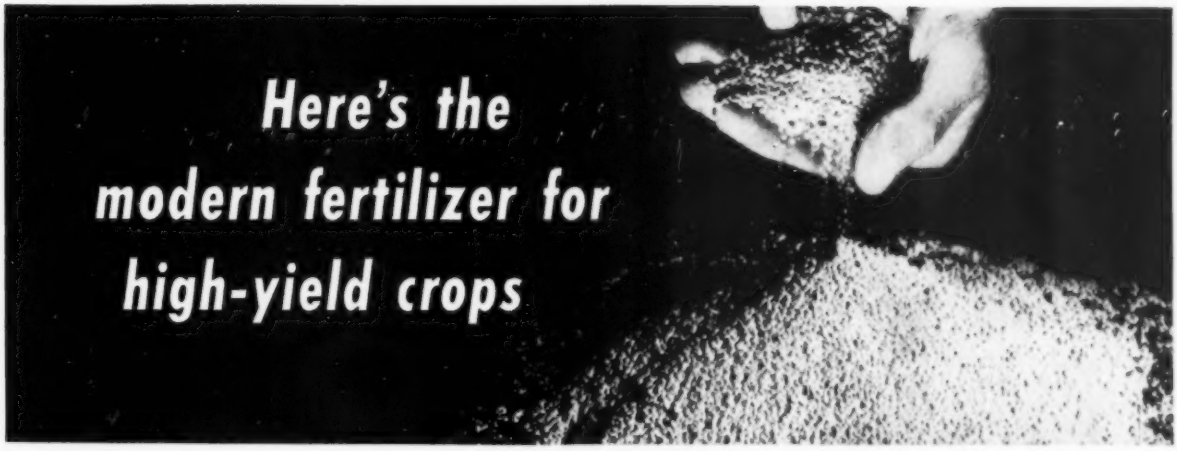
Chisel out affected area until sound wood is reached. Make clean cuts through growth ring. Disinfect area by washing with copper sulfate solution.

Drive nails into the cavity at different angles, and reinforce with metal lath or strong wire mesh. This holds concrete.



Apply concrete mixture. Use 1 part cement to 4 parts sand, just wet enough to pack firmly. Let it set overnight.

Put another coat of concrete on top for finish. Use 1 part cement to 3 parts sand. Smooth finish with putty knife, and paint. —*Helen Russell, North Dakota.*



Corn turns out more bushels at lower cost per acre with 500 to 1,000 pounds of ARCADIAN 12-12-12. Plow under, disk in, or band-fertilize deep to get strong corn with deep roots—corn that's early-maturing, high in quality, rich in protein.

Small grains fertilized with ARCADIAN 12-12-12 start fast, stool out strong and produce more plump kernels. ARCADIAN 12-12-12, top-dressed early, provides nitrogen for vigor plus phosphorus and potash to produce heavy, top-quality grain.

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Fruit from high-fertility orchards nourished with ARCADIAN 12-12-12 shows improved size, finish and color. Ideal for apples, peaches. Cover crops also grow better and help improve soil condition remarkably.

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Contact your ARCADIAN 12-12-12 distributor or write us. It comes in easy-handling 80-pound bags. Excellent fertilizer for corn, small grains, pastures, truck, fruit and other crops. Order now for prompt delivery.

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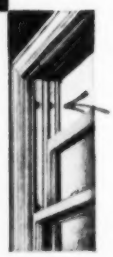

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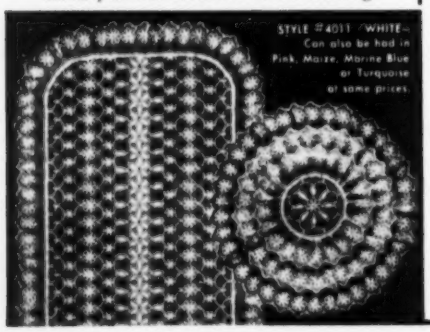
Sheer ruffled NYLON, with dainty cotton-embroidered decoration. Adds beauty to your every room. Durable ...easy-to-wash...little or no ironing.



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	12" x 18" 1 ruffle		1.25 ea.
	11" x 14" 1 ruffle		1.00 ea.
	8" x 14" 1 ruffle		.75 ea.
	9" round 2 ruffles		.75 ea.
	12" round 3 ruffles		1.00 ea.
	15" round 4 ruffles		1.25 ea.

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These make it

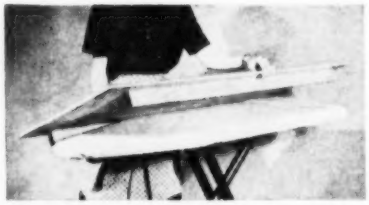
Easier to iron a shirt

Maybe you've got the ironing of shirts down to a science. But these ideas might help you improve your method still more:

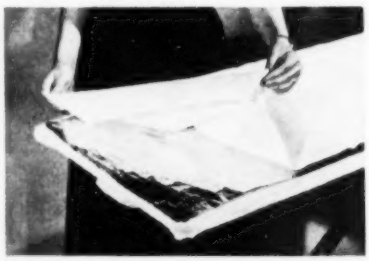
An extra-wide, ironing-table top makes it possible to spread a shirt flat, iron it with fewer stops to change its position.

Aluminum foil beneath the top cover of your ironing table reflects the heat and makes fabrics dry faster as you iron.

A household posture chair, or an office chair with an adjustable back—and an adjustable-height ironing table—are a perfect combination for preventing fatigue. With these, you can learn to *sit down* to iron. And use a *lightweight* iron; it does an excellent job, and it's easy to lift.



Wide table top is 3-ply board, 20 inches wide, length of your ironing table. Wood strips on bottom keep board from wobbling



Thick padding simplifies ironing. An old quilted bed pad is ideal. Over this, put aluminum foil and homemade muslin cover

Photographs: Fletcher

Sitting down to iron is top-notch energy-saver. Chair should have casters, and it should adjust to give support to your back

Successful Farming *stores*

Here are local stores interested in the farm family, and carrying out the practical editorial ideas from *Successful Farming* magazine. Starred stores have full-time home-planning consultants, ready to offer suggestions and advice.

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Champaign ..... Robeson's
Springfield ..... A. Dirksen & Sons

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*South Bend ..... Robertson Bros.

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*Des Moines ..... Younkers
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Iowa City ..... Kirwan Furniture
*Marshalltown ... The McGregor Co.
*Sioux City ..... Martin's
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Hutchinson ..... Wiley's
Salina ..... Mehornay's

Michigan

Jackson ..... Jury-Rowe's
*Lansing ..... J. W. Knapp Co.

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Mankato ..... Landkamer Bros.
Worthington .... Hanson's Town & Country

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One cooky recipe six good ways

By Marjorie Jacobson

One basic recipe—but six different cookies! They're the crisp, crunchy oatmeal kind that go so perfectly with a cool glass of milk for a midafternoon or after-school snack. (And don't forget to try a few while they're still a little warm from the oven.)

It's easy to make the favorite of each member of the family. If Dad votes for raisins while Brother holds out for gumdrops, make some of both. You may find still other variations in addition to the ones we've given. For a special treat, try adding both nuts and chocolate pieces. Or, combine dates and orange peel. And for a crackly glaze, dip the balls of dough first in milk, then in sugar and place on a cooky sheet, sugared side up.

Photograph: Stanley

These are sure to be a cooky-jar favorite—you'll be happy the recipe is a large one

Six-in-one Oatmeal Cookies
(Makes 6 dozen)

- 1 cup shortening
- 1 cup brown sugar
- 1 cup granulated sugar
- 2 eggs
- 1 teaspoon vanilla
- 1½ cups sifted flour
- 1 teaspoon salt
- 1 teaspoon soda
- 3 cups quick-cooking oats
- ½ cup chopped nuts
- 1 package semi-sweet chocolate pieces
- 1 cup cut-up gumdrops (omit black ones)
- 2 tablespoons grated orange peel
- 1 cup raisins
- 1 cup cut-up dates

Cream shortening and sugars thoroughly. Add eggs and vanilla and beat well. Sift together flour, salt, and soda and add to creamed mixture, blending well. Add oats and one of the following: nuts, chocolate pieces, gumdrops, orange peel, raisins, or dates. If desired, divide dough into several portions, adding something different to each one. Form dough into small balls or drop from a teaspoon onto an ungreased cooky sheet. Bake at 350° (moderate) about 15 minutes or until lightly browned. Remove from cooky sheet and place on wire rack to cool. **END**

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Please send me complete install-it-yourself instruction kit and ARISTOFLEX color chart. Enclosed is 10c to cover mailing.

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New steering that lets you turn the wheel with little effort at corners or when parking. Comfo-Vision cab. Big curved one-piece Sweepsight windshield. New soft-action springs. Soft-pedal clutch. New finger-tip shifting ease. Big, new brakes, with the largest *effective* lining area in the lowest-priced field!

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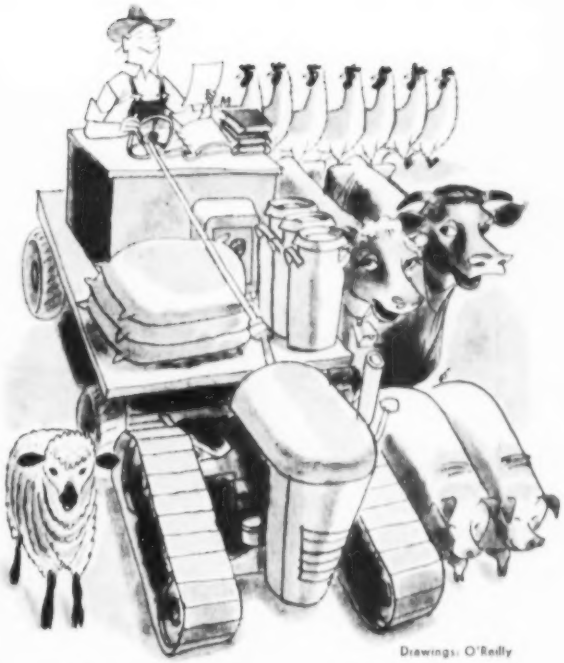
Better roads mean a better America

INTERNATIONAL® TRUCKS

Standard of the Highway

He just "farms"—makes no plans, keeps no records, breaks his back . . .



Drawings: O'Reilly

. . . this wise apple uses his head, saves his back, makes more profit

How to be the

Best farmer in the county

By L. S. Robertson and H. G. Diesslin
Purdue University

Be honest now, don't you have to jockey your corn-yield figures a bit once in a while to make them come out better than your neighbor's?

Most of us want to be the best farmers in our community—or county. And you probably have one farmer spotted that you'd like to beat when it comes to farming.

We think we can help you do that. We've spent most of our lives working with Midwest farmers, studying their records, and helping them manage their farms to make more money. We've found *why* and *how* some farmers get ahead faster than others. Here are important points.

Keep your feet out of the oven. An Indiana farmer discovered recently that he was making money only about 200 days a year. He spends most of the winter "with his feet in the oven." College specialists tell us this underworking disease has been contracted by at least one-third of our farmers.

The reason is that we have more power and machinery—and hire more services—today than ever before. That means we can take care of bigger farms and more stock than most of us do.

The answer: Get more land, more livestock, or both. How? If you're short of money, you'll get ahead faster by running a farm bigger than you can pay for. This may mean: (1) a mortgage on more land than you can handle free from debt, or (2) renting additional land.

If you're really cramped for money, it's smart to rent a farm and use your money for more and better machinery and livestock. Actual records prove repeatedly that *renters* on good-size farms make more money than *owners* on farms that are too small.

Keep some cash in the bank. That sounds like easy advice to give—hard to follow. What we're getting at is this—don't tie up all your money in permanent fixtures, like land and buildings, so you have little left for machinery and livestock.

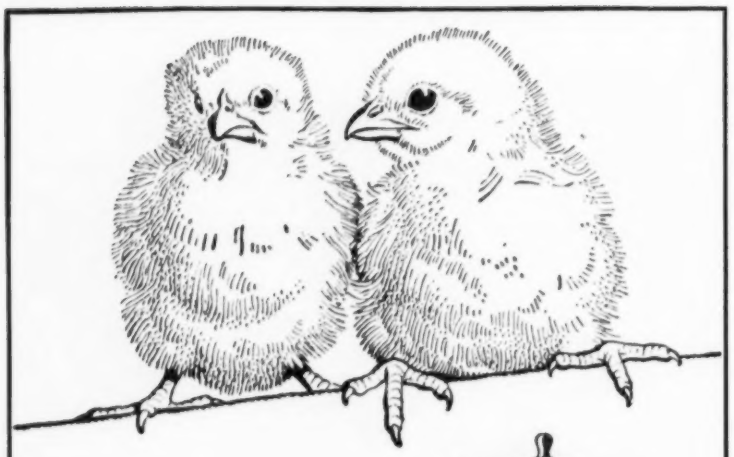
This cash you've stacked up lets you tell the feed man you want a discount for cash, buy a barrel of oil at lower rates, hold your hogs and corn for the best markets, and pick up occasional bargains at farm sales.

Find a smiling banker. One way to get money for better farming is by being a buddy to your banker.

Credit is an important tool in profitable farming. It lets you use someone else's money in your business. Most good farmers regularly use credit. And a good credit rating helps you out of the hole if your pigs get rhinitis.

Too many farmers cut themselves short because they are afraid to or can't borrow money. But what's more profitable than borrowing $1,000 for 8 months for fertilizer (cost: $40 for interest) for $2,000 to $4,000 worth of extra corn?

Keep these points in mind: Pick a lender in whose fairness you have confidence. Borrow only to boost income. Borrow for household goods or living expenses *only* in an emergency. Don't let debts get too high—this often leads to poor farming. [*Turn to page 150*



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Save up to 50% in grain ration when you feed mow-cured hay. Less leaf-loss, more hay per acre. No weather-risk as you usually mow hay the same day cut. For high, narrow barns, mow-cure with the new Louden Uni-Duct system. Easily installed. For small grain and corn, get a Louden Hi-Dri drier. Fits round or square bins.
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You'll quickly forget you have painful callouses, burning or tenderness on the bottom of your feet, when you apply Dr. Scholl's Zino-pads. Thin, soft, wonderfully soothing, cushioning, protective. Separate *Medications* included for quickly removing callouses. Try them!

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"What makes a CHAMPION?"
"PERFORMANCE"...*not claims!*

Here are facts based on performance of *Perfection* DUBL-CHEM-FACED MILK FILTER DISCS:

1. By their dependable *performance* they have attracted unequalled "championship crowds" of users.

2. The cotton fibres in these and other Schwartz-made filters are treated by an exclusive double chem-faced process to assure fast filtration and thoroughly cleaned milk.

3. Every day farmers use more Schwartz-made dependable milk filters than any other kind (as evidenced by International Business Machine records).

4. Competitive tests prove that no other milk filter discs (with or without gauze) can remove more sediment (even microscopic particles) than these filters do.

5. For highest quality at low cost, insist on Perfection DUBL-CHEM-FACED Milk Filter Discs.

You BE THE JUDGE!

Write for samples . . . and include your Supplier's name

SCHWARTZ MFG. CO. *"First in Filters"* Two Rivers, Wis.

Best farmer in county

From page 149

Resist temptation to "live it up." There's an ever present temptation to use your assets in order to buy more *today*. But remember: Young farmers who spend less than they make may someday own farms. Those who "live it up" as money comes in will seldom own farms—unless they inherit them.

Another reason for spending less for living expenses than you make, is that you may not make as much next year.

Spend money to make money. The farmers who make the most money usually are those who *have the most money rolling in*, rather than those who *spend the least* for operating expenses.

So while you recognize the need for keeping farm expenses within bounds, don't forget that controlling expenses can be carried too far. In other words, *it is necessary to spend money to make money.*

It is good business to spend *generously* for things that increase your production—such as good breeding stock, fertilizer, protein supplement, and good seed.

Keep records (in a record book). The story is told of one Illinois farmer who, when his barn was burning, tore the door off its hinges instead of trying to rescue his cows. When asked for an explanation, he said, "Oh, I had all my records for the past four years written on that door, and I couldn't afford to lose them."

This unfortunate farmer knew the value of records—but he didn't know the right place for keeping them.

Complete, accurate records are important now—and will become increasingly important in the years ahead. A good farm record will help you: (1) make tax reports; (2) improve the operation of your farm business by helping you find strong and weak points; (3) record your financial growth from year to year; (4) summarize your financial status when you want to borrow money; (5) make partnerships, such as landlord-tenant relations, smoother and more businesslike; and (6) make farming more interesting.

What records do you need? Minimum records include all cash income and expenses plus an annual listing of all your farm property. In addition, top farmers keep annual crop and livestock records.

Plan, plan, plan. One good Indiana farmer told us, "I do a lot of planning in running my farm—but I don't carry out all my plans." He changes his plans as *conditions change*.

Your big problem in making money is this: to use your labor, land, equipment, and money to best advantage. The success with which you *fit all these different phases together* into a smooth-working business largely determines your profit.

How to do it well: Make a long-time plan of your cropping system. Fit your livestock numbers to the grain and forage available. Fit your farm layout, your buildings, and equipment into this crop

and livestock picture. Plan your marketing dates and procedures. Plan your year's work so you are making money with every month's work—and so you don't have four jobs stacking up at once.

Then follow your plan, *except:* Of course, you can't plan once and forget it. Your plan must be changed as conditions change.

Don't just follow the crowd. "With beef cattle at 30 cents a pound, I thought I could put my farm in grass, raise cattle, and quit this hard field work," one central Indiana farmer told us. "But now, just as I have my herd well started, cattle prices are down and it doesn't look so good."

His experience is a very common one. When prices of one farm product are high in comparison to others, people shift to it. Then we get more of that product and prices come down. For instance, both beef cattle and hogs have recognized price cycles.

By watching these price cycles you can avoid getting caught. If everyone is shifting to hogs, that probably is the time to look to something else. Each month, *Successful Farming's* Farm Outlook page keeps you up on market prospects.

Buy and sell at the right times. Quite a lot of farmers do a good job in putting on pounds of meat, but buy or sell their animals at the wrong time and cut themselves short on profits.

To do a better job than your neighbor, you've got to market better than he does. You have to choose the right place, the right time, and the right method.

Part of the job is to study average changes in price throughout the year—and plan your production and storage to take advantage of these changes.

For instance, hog prices average highest in late July and August. Eggs bring more on graded markets. Corn averages highest in June, and lowest at harvest.

Protect yourself with insurance. You can't afford to insure against *all* the risks of fire, weather, and wind. What you need is protection against losses *large enough to give you a severe setback in business.*

Thus, the three "musts" in your farm insurance program are these: (1) fire, windstorm, and extended coverage on real and personal property; (2) liability insurance on all vehicles you use on the highway; and comprehensive personal liability insurance on your real and personal property, and on your hired help; and (4) sufficient term or ordinary life insurance to protect your family in case of your death—particularly if there are young children in the family—and to cover indebtedness if it exceeds much over one-fourth of your total assets. Term and ordinary life insurance give *maximum protection* with *minimum cost.*

Spend a few hours considering these points. Go over your whole farming program. Do some figuring with a pencil and paper. Talk over your ideas with your county agent or the high-school vocational agriculture teacher. You can be *the* one your neighbors admire. **END**

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★ **Has no objectionable odor**

★ **Can be washed again and again**

New Book Packed with Modern Color Suggestions—FREE!

● This handsomely illustrated book, "Color in Action," is yours for the asking—at your Pittsburgh Paint dealer's. Contains 40 pages that tell you how to put color to work to make your home as livable as it is lovely, also how to choose color schemes for every type of setting.

IT'S REALLY AMAZING how easily and quickly even a beginner can paint a complete room in a few hours with WALLHIDE *Rubberized* Satin Finish.

This remarkable paint glides on like a charm without a sign of laps or brush marks . . . dries in less than an hour without a trace of unpleasant odor.

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Try WALLHIDE *Rubberized* Satin Finish in one or two rooms and see how easy it is to give your home bright new beauty! And remember . . . there's such a wide range of glorious colors you can really let your imagination go! Your Pittsburgh Paint dealer has SATINHIDE Enamel in matching colors for woodwork and trim.

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Get More Milk

"We are milking cows out clean in 3 to 3½ minutes with our Globe Milker that took 10 to 12 minutes by hand. Cows are giving more milk and seem to like the Globe milker as well as we do" reports Damen Litsey of Illinois.

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SAVE $80.00

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"Had an increase of 6 lbs. of milk daily per cow after using the Globe Milker" reports Henry Colburn of Ill.

We have a very special, low price for farmers who write immediately, giving number of cows milked and whether milking by hand or name of milker now in use.

GLOBE 1-2-3-4 Rhythm MILKER

has proved easier to use . . . easier to clean . . . easier on cows . . . the only milker backed by a $50 warranty of INCREASED PRODUCTION and BETTER MILKING. Unequalled for gentle, 1-2-3-4 Rhythm milking that keeps cows contented and giving down more milk. Not one but hundreds of good dairy farmers report that their Globe Milker has cut milking chores in half. Single and double milking units for any size herd.

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No. of cows milked.....

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Tips for dairymen

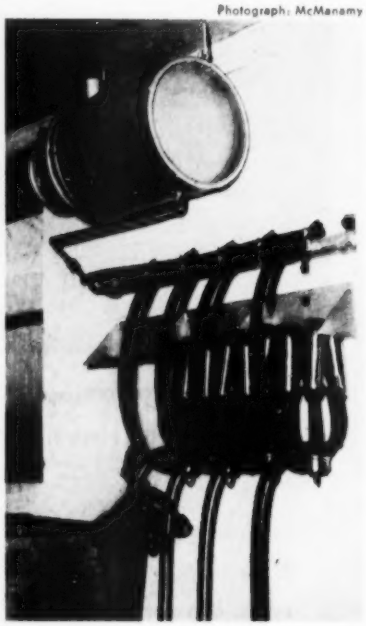
Homemade sanitizer for milking equipment

Some pipe, copper tubing, and an old milk can made the sanitizer shown below. It hangs in the milkhouse of Donald H. Weir, Schaghticoke, New York.

Weir hung a milk can sideways from the ceiling and connected the open end to a water line. Then he connected a copper tube from the lower outlet of the can to a larger pipe with six petcocks.

By attaching milking-machine lines to the petcocks and pouring a chlorinated solution into the can, Weir can sanitize his milking equipment. He allows the solution to fill the lines to the top of the teat cups.

Photograph: McManamy



Specific gravity test for milk solids checked

A quicker—but accurate—method of determining milk solids is being sought. Use of the lactometer, in which specific gravity is used to calculate solids, is now being field-tested by the University of Wisconsin.

The lactometer is an adapted hydrometer that measures the specific gravity of milk samples. From the specific gravity reading on each sample, scientists can easily and quickly calculate the content of solids.

In the older, standard gravimetric method, samples were weighed, then dried, usually at 100 degrees centigrade. Weight of the remaining contents after drying them gave the milk-solids content. The lactometer method is a much faster process for determining the solids content of milk.

Early-freshening heifers are top producers

Maybe we have been keeping heifers around too long before their first calves were dropped.

In Wisconsin, heifers that first calved at 22 to 25 months gave a total of 1,920 pounds of butterfat up to 7 years of age. Heifers calving at 28 to 29 months produced 1,760 pounds of butterfat, and those calving at 30 to 31 months gave only 1,720 pounds up to 7 years of age.

Heifers freshening very early did not produce as much as older heifers in their first lactation, but made up for it later. Earlier-freshened heifers will also need to be fed a better ration during the first lactation, since they will still be growing.

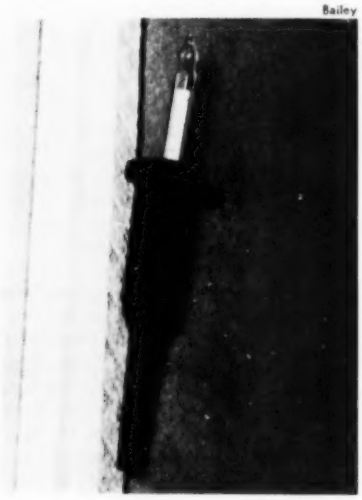
• • • •

Holds dairy thermometer

The Ward Brothers, of Jefferson County, Wisconsin, have a safe, out-of-the-way place for their dairy thermometer (below).

They keep it in an old milking-machine inflation hung on the milkhouse wall. It's safe against breakage.

Bailey



Deadly baby-calf scours can be bad in spring

The type of calf scours that attacks baby calves 1 or 2 days old is worst in winter and spring.

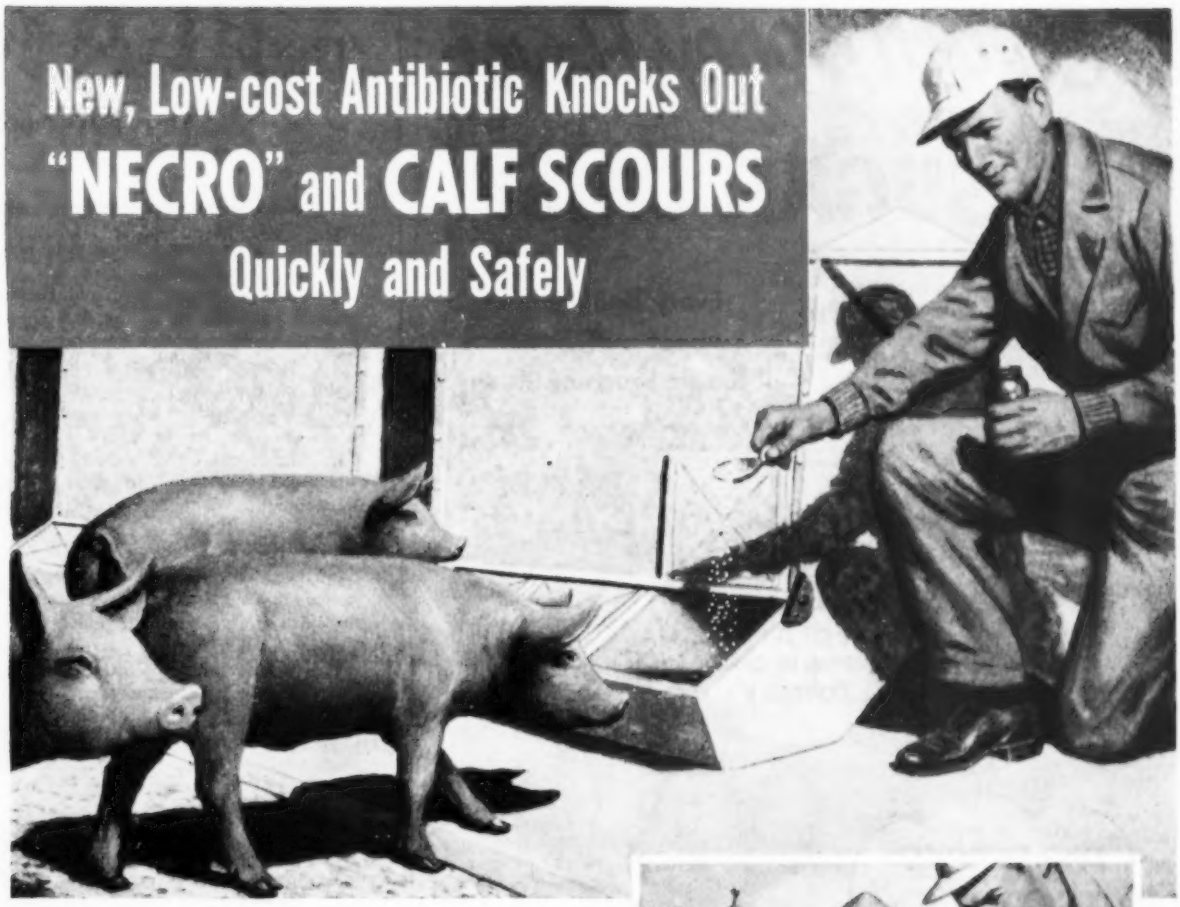
Veterinary Scientist Arlan McClurkin, of the University of Wisconsin, says it is more of a problem when cows and calves are penned up together. The virus causing the scours is carried through the air.

McClurkin suggests two practices to cut down on losses from this type of scours:

First, give the calf colostrum as soon as it is born.

Second, if possible separate cows and calves after the calf has gotten colostrum.

New, Low-cost Antibiotic Knocks Out "NECRO" and CALF SCOURS Quickly and Safely



Now you can control costly "necro" and calf scours quickly and easily.

Give your livestock safe, economical VETSTREP at the first sign of scouring. This new antibiotic product stops "necro" (swine enteritis) and calf scours—often in a single day.

VETSTREP is *easy* to use, too. Just add to water or milk. No fuss, no mess, no expensive equipment needed. You get superior results with VETSTREP because it contains streptomycin which is active in the intestines.

VETSTREP also is superior for *air-sac infection* (CRD) in chickens and *blue comb* in turkeys. This low-cost streptomycin remedy lowers mortality and stunting, gets birds back on feed and maintains weight gains.

Your poultry supply dealer, feed store, or druggist has VETSTREP available in bottles of 15, 75, and 750 grams.

Order a bottle today. *Prompt use can save you hundreds of dollars.*

VETSTREP is the registered trade-mark of Merck & Co., Inc. for its brand of streptomycin sulfate oral veterinary.

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Research and Production for Better Poultry and Animal Health

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The PLAY

Where playfellows

Mr. Rabbit's Late Supper

"I think the evening is going to be perfect," said Mrs. Rabbit.

The Rabbit twins, Essie and Bessie, glanced anxiously up at the sky. There wasn't a cloud to be seen anywhere.

"Yes, everything is going along just right," Mrs. Rabbit continued. "The Brown family will be away from home; Shep, the collie, has been shut up in the barn, and Smoky Cat is in the basement. The moon is nearly full, and there will be stars tonight. What more could anyone ask?"

"But, you two run on over to Mr. Squirrel's sweetshop now and order the ice cream. Your sister Myrtle is busy baking cakes and cookies, and your brother Tommy is picking strawberries. I want to make up the salad. Now, scoot! Evening will be here before we know it."

An hour later, Mr. Rabbit came home. He frowned as he looked about and saw no supper laid out on the table, for working in the Easter-egg factory made him so hungry.

"I'm sorry supper is late," remarked Mrs. Rabbit as she came out of the bedroom, dressed in her Sunday best. "But Polly Woodchuck was taken ill today, and I promised we'd run over when you came home to see how she is."

"Can't we wait till after supper?" grumbled Mr. Rabbit.

"She's expecting Doctor Beaver then, and besides, a little cheering-up now will do her so much good."

"Well, if that's the case," nodded Mr. Rabbit, "wait just a minute while I change my clothes."

It was a good distance over to Polly Woodchuck's home near the old gravel pit. And when they got there, Mr. Rabbit couldn't help thinking how well Polly Woodchuck looked. She didn't look

Drawing: Hiser

HOUSE

meet every month

sick at all. He was just a little bit put-out with Mrs. Rabbit for insisting that he come along. By and by, he glanced at his watch. "I'm glad you're feeling better, Polly," he said politely, "but we really must be going. I haven't had my supper yet."

"You poor thing!" cried Polly Woodchuck. "You *must* be hungry." But she insisted that they stop to admire her fine garden on the way home. And she never even offered Mr. Rabbit so much as a lettuce leaf.

"Dark is going to catch us," he fumed as he and Mrs. Rabbit started along the path toward home. You shouldn't have talked so long. . . ."

"Hush!" soothed Mrs. Rabbit. "It won't be long now."

"What makes that bright light ahead?" Mr. Rabbit wondered out loud suddenly. "Maybe our house is on fire! Hurry! Hurry!"

At the edge of the lawn he stopped, and his eyes grew bigger and bigger. Sparkle and Dazzle Firefly were there with all their relatives. They made the rabbit house and yard almost as bright as day. Mrs. Possum and her 10 babies were there, too. And so were Buddy Raccoon, the Chipmunk family, and Mole brothers, and many other friends and neighbors.

As the crowd made way for him, Mr. Rabbit could see a long table set out on the lawn. It was groaning with good things to eat, and in the center was a great big cake, just blazing with candles.

Still, Mr. Rabbit didn't understand until the cricket orchestra tuned up and Essie and Bessie began to sing, "Happy birthday, dear Papa!"

"Why, sure enough, it *is* my birthday!" cried Mr. Rabbit, happily. And my, what fun everybody had! The little woods folks are still talking about that April when they went to Mr. Rabbit's birthday party.—*May A. Baker*

Can you read this?

This looks hard to read, doesn't it? But if you just remove all the unnecessary words, or words that do not belong in this sentence, you will uncover one of Benjamin Franklin's wise sayings.

> *"Earlyalltothebedunnecessary andwordsearlyortowordsrise thatmakesdoanotmanbelong healthyinwealthythisand sentencewise."*

Answer: If you remove "all the unnecessary words, or words that do not belong in this sentence," you will uncover: "Early to bed and early to rise, makes a man healthy, wealthy, and wise."

These fresh-caught fish are conveyed into sanitary canneries, where the whole fish is processed into Puss 'n Boots Cat Food.

"This blonde is really my kitten."—(Chandoha) *

Science Confirms

CATS GROW AND THRIVE ON NATURE'S LIFE BALANCE IN WHOLE FISH

Cats are delightful pets. Their changing moods from dignity to playfulness, their bright eyed vigilance, their contented purring . . . these qualities have endeared felines to their owners for centuries.

But have you noticed that some cats show these traits much better than others?

The secret of a cat's health and disposition is in its feeding. According to biologists, the best single food you can give your cat is *whole fish*. There's a reason for that word "whole". It's really an exciting story for any cat owner.

Only Whole Fish has Life Balance

In a living fish there's a balance of elements which nature uses to sustain a healthy organism. When whole fish is prepared for cat food, those nutritive elements are retained intact. That's why cat food made from parts of fish is not enough. While almost any part supplies something valuable, your cat needs all those nutrients, in nature's own life balance. Only the *whole* fish supplies them all.

Puss 'n Boots is made from Whole Fish

Puss 'n Boots is not made from parts of fish or scraps. We process *whole* fish with nature's balance intact. Valuable cereals are added for flavor, digestibility and all-round nutrition. Feed it regularly, and you'll see a lovelier, livelier pet! Food stores everywhere have America's largest selling cat food, in large and small size cans.

*For a full color enlargement of this cat photograph, send 50¢ to Puss 'n Boots, Dept. S4, P. O. Box 1659, Grand Central Station, New York 17, N. Y.

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Always an ample supply of low-cost hot water for kitchen, laundry and bath.

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Simplest, strongest — no short turns. Widest, sturdiest **Portable**—handles baled hay. Write us your crib problems today. State whether interested in **Bucket** or **Portable**. Postal brings FREE catalog.
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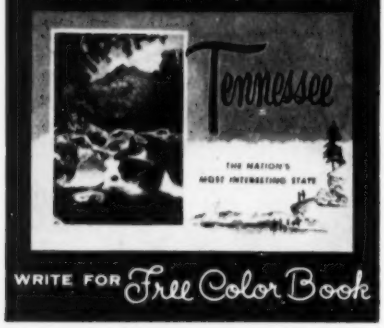

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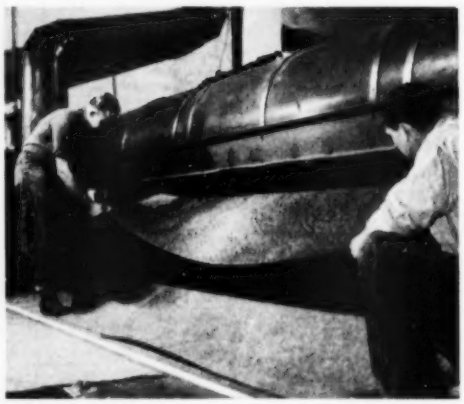
Here's how a Specialist gets your rugs clean

Would it shock you to learn that your living-room rug is loaded with 2 to 5 pounds of dirt? That's the amount taken from most rugs sent to cleaning plants!

No home care is comparable to expert professional cleaning of your carpets. For about $7.95, your 9x12-foot rug can be put in the pink of condition—washed fresh and clean, and resized. A rug given such thorough cleaning at regular intervals usually will last years longer, too.

For a small extra charge, the reputable rug cleaners will spray your carpet and give you a *written guarantee* that it will be safe from moths and carpet beetles for periods up to *15 years!* This guarantee insures that the rug will be either invisibly repaired, or entirely replaced in case of such damage.

Here's how expert cleaning is done:



◀ **Dusting.** A giant machine removes the loose grit and dust by vibrating the carpet.

Heavy particles fall to the bottom; light dirt and lint is drawn off by suction. Removal of the deeply embedded dirt in carpet is a very important step.

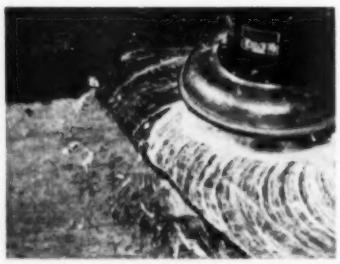
Shampooing. Rug is soaked with cold water, ▶ then gently machine-scrubbed with a special neutral suds and a rotating brush. Detergent used by better plants leaves no residue or scum to cause rapid resoiling when rug's back in use

◀ **Rinsing.** Rollers carry carpet through forceful spray of cold water. This removes all trace of the suds and soil.

A wringer opposite the spray removes excess water — the rug comes out bright and silky!

Photographs: Hopkins

Drying and sizing. Carpet is hung in a drying room where forced hot air dries it quickly. A heavy iron bar clamped to bottom edge prevents excess shrinkage. Glue is sprayed on the back of the rug if it needs new stiffness



◀ **Tacked-down carpet.** Unless preshrunk by manufacturer, rugs shrink some with first cleaning. Carpet cut to size of a room is tacked to floor for shampooing to prevent shrinking. A no-rinse foam is used, then vacuumed

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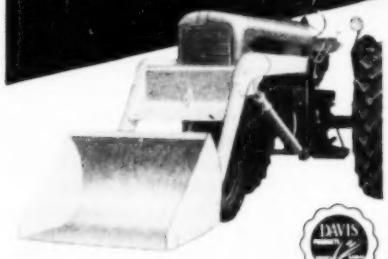

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What we still don't know
ABOUT CANCER—
and one of the reasons why

In the past years, knowledge of the nature of cancer and how to treat it has grown encouragingly. Patients who would have been considered hopeless cases five years ago, today are being completely cured. Even those who apply for treatment too late can usually live longer, less painfully, because of modern treatment.

All the same, there have been defeats as well as victories. A single example: Why so many more men are now dying from cancer of the lung. In 1933, lung cancer killed 2,252 men, in 1953, some 18,500!

Why haven't we found more of the answers to cancer?

Because cancer is an immensely complex problem: difficult to diagnose, and difficult to treat; challenging to the best research minds.

And there is another reason: We do not have enough money!

Last year you gave the Society almost twenty millions to fight a disease that, at present death rates, will kill twenty-three million Americans. Less than one dollar for each American destined to die from cancer.

Much more is needed for research, education, clinics! Won't you please do your part . . . NOW?

American Cancer Society

Simply address the envelope with your contribution:
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What's your score on Carpet care?

If you can correctly mark each of these statements "right" or "wrong," you're in the know about rug care! The answer follows each statement.

Ammonia is an excellent all-purpose cleaner for sponging the surface of carpets

Wrong. Alkaline solutions, such as ammonia, may cause bleeding of colors and other discoloration of wool and cotton carpets, and may damage the fibers in wool rugs. For sprucing up heavy-traffic areas when they're dingy, sponge the rug surface with foamy suds of a *mild* detergent such as that used for silk undies. Wipe off the suds with a damp cloth, then dry the surface of the rug with a clean dry cloth.

Soap should not be used on a rug

Right. For sponging the surface of the rug at home, or for thorough washing done at a rug-cleaning plant, a nonsoap detergent is best. Regular soaps leave a sticky scum on rug fibers which hold dust—the rug seems to get dirty faster than before it was cleaned.

Occasional beating does a rug good

Wrong. Injury to the backing on a rug from this treatment far outweighs its possible value. Use a good vacuum cleaner, and use it often so heavy soil doesn't have a chance to accumulate deep down in the pile of the rug.

Vacuum cleaners wear out rugs

Wrong. The everyday dirt that collects on the surface of your carpet has in it bits of stone, coal, and clay with knife-like edges. Every time someone walks across the room, these particles get ground into the carpet, cutting at the fibers and wearing them down. The more of these particles you can take up in your vacuum cleaner, the longer your rug will last. The wear caused by running the cleaner over the rug is minor by comparison.

Professional rug cleaning is costly

Wrong. Not if you measure the price against the fact that keeping a rug clean will increase its life. For a 9x12 foot rug, a professional cleaner probably will charge about $5.50 to take it to the plant and give it a thorough washing with detergent foam. He will make a small additional charge if you want the carpet resized—new stiffening put on the back.

Vacuum cleaning damages new rugs

Wrong. Don't get alarmed at the quantity of colored "fluff" the vacuum cleaner removes from your new carpets. Carpets are clipped during their manufacture, and these loose fibers will normally shed off for several months. **END**

PLENTY OF WATER WHERE YOU WANT IT!

F & W Multi-Purpose Adaptable for Shallow or Deep Wells

Of course you want the pleasure and convenience that come with an automatic pressure system . . . modern bathroom, kitchen and laundry. Yet an automatic pressure water system doesn't cost money, it pays for itself and earns money through household savings and increased farm production. That's why it pays to buy an F & W Water System. Multi-Purpose Jet Pump shown above assures utmost dependability and economy. If for any reason it is needed for deep well pumping, it can be changed simply by removing jet and installing at proper level in well. There are no extra pump parts to buy. Whatever *your* need, there's an F & W system with comparable advantages, such as the patented variable ejector or automatic control valve. Each pump is factory-tested for pressure and capacity; each assures quiet, long-lasting performance.

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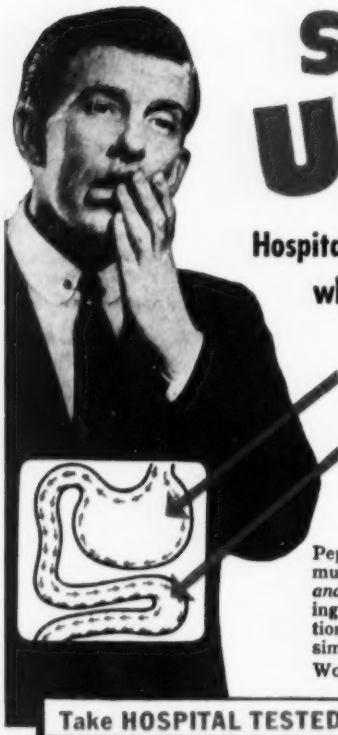
the way thousands of physicians and dentists recommend.

HERE'S WHY . . . Anacin is like a doctor's prescription. That is, Anacin contains not just one but a combination of medically proved active ingredients. No other product gives faster, longer-lasting relief from pain of headache, neuralgia, neuritis than Anacin tablets. Buy Anacin® today!



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2 **Pepto-Bismol also helps calm distress in the intestinal tract . . . where soda and alkalizers NEVER help!**

Pepto-Bismol's special medicinal formula soothes *both* the irritated stomach *and* intestinal walls with a gentle coating action. It helps retard gas formation; calm heartburn, nausea. Controls simple diarrhea—without constipating. Wonderful for children, too.

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and feel good again!

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BEAR CAT Forage Harvester

Stronger-Better-Bigger Capacity

Strikingly different in design and construction than any other, isn't it? A forage harvester that's compact, streamlined—and free of compressor wheels or other cumbersome parts!

The Bear-Cat's that way. Stronger, bigger, better. That's why it handles any kind of forage from the field, green or dry, from windrows or from corn rows—and no monkey business.

BIG! POWERFUL! FAST!

3 speed and reverse transmission; governor control. 76 h.p. engine.

Two Row Row-Crop Attachment doubles capacity with half the travel.

Don't Delay if interested. Again this year demand is far exceeding supply. Inquire promptly.

No Compressor Wheel Needed. Look at its wide pick-up, wide cutterhead, and extra wide feed rolls that *do not* taper down to a narrow throat. There's no "choking" with a Bear-Cat. No delay. Large quantities flow freely and easily, enabling this powerhouse on wheels to travel much faster and harvest much more. Arrange now to get your Bear-Cat. Send for our free Harvester Catalog and name of dealer near you. Address Dept. 606.

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MANUFACTURERS OF FINE FARM AND RANCH MACHINERY FOR OVER 45 YEARS

Dry-lot prices

From page 61

full-fed on pasture and later in dry lot until finished. Another group grazed an entire pasture area all summer without grain, then were finished in dry lot.

Another group grazed on pasture all summer without grain, but under a controlled system of grazing.

Under the controlled system, the pasture was fenced and divided. One half was grazed, and on the other half, the first crop was cut for hay or grass silage—a good method of getting more total forage per acre. The rest of the summer the cattle grazed over the entire area. A final group was fed in the dry lot as a check.

Here are some of the findings from the 5-year study with yearlings:

1. Pasture replaced grain and some protein. No protein was fed while the cattle were on pasture. It was assumed that the pasture supplied this need.

2. The longer the pasture was used without grain, the less corn was required per steer and per hundred pounds of gain than for similar cattle fed in dry lot. More pasture was required when grain was not fed. And the cattle were heavier at marketing time when they had the longer grazing period without grain.

3. Yearling cattle full-fed on alfalfa-brome pasture were ready to go to market at the same time and at the same weight as cattle full-fed in dry lot. Both groups consumed the same amount of grain. But the pasture replaced the protein and hay necessary for the cattle in dry lot. Pasture was not used to the extent of grazing all summer—but the market day for these cattle was the same as for the dry-lot cattle.

The pasture cattle directly off grass sold for slightly less because of the chance of yellow color. To avoid this chance for yellow color, some feeders who full-feed on pasture take cattle off pasture and "dry them up" for 30 to 60 days in dry lot before going to market.

Three-year studies with Choice calves on pasture-feeding experiments indicate the same conclusions as outlined for yearlings. And surprisingly, the calves made more total gain with higher daily gains on less pasture per steer than did the yearling cattle on the good alfalfa-brome pasture.

Here are some of the results from the experiments with the Choice calves:

1. The calves in dry lot and those full-fed on pasture needed about 60 bushels of corn to finish at average Choice in late October. For the full-fed-on-pasture group, pasture again replaced most of the protein and hay required by the cattle in dry lot.

2. Another group of calves—grazed 60 days without grain and then full-fed on pasture—reached market about December 1 on about 45 bushels of corn.

3. The group of calves grazing without grain were not ready for market until after January 1, but consumed only about 38 bushels of corn.

The results from these experiments with calves and yearlings show that grain is saved by using pasture. However, this fact may or may not save you money, because maximum utilization of pasture with lower gain costs does not match or coincide with maximum use of seasonal price trends. This is particularly true during the period when cattle marketings are expanding.

So, what *are* your best bets for working out a practical and profitable method of combining grass and grain in your feeding operation?

First, the better grades of cattle give you a more flexible feeding program. Don't try to push poorer grades into a higher class. When market conditions warrant or pasture dries up, top grades of cattle can be full-fed corn and marketed in the fall when this grade of cattle sells to best advantage.

Medium and plain cattle make good use of pasture—they're as efficient as Choice cattle. But when pasture runs out, and grain has to be fed, these medium and plain cattle are on the market in the fall when they sell at the *least* advantage.

Another point to remember is that you *can* profitably full-feed grain on pasture. You save most if not all of your protein costs. Another alternative to the full-feed-on-pasture plan is to graze the cattle *without grain* during May and June, and follow with a *full feed of grain after July 1.*

Starting the full-feeding after July 1 delays the market day somewhat, but it uses *more pasture* and *less corn* than full-feeding during the entire pasture season. The delayed full-feeding plan also utilizes pasture alone during the lush growing months when the forage is palatable and high-producing.

Over the years, yearling cattle on grass alone at Iowa State have made nearly half of their total summer gains during May and June on alfalfa-brome pasture.

Grazing cattle all summer without grain makes the fullest use of pasture, with greater saving in corn. But it pushes the market day too far ahead. The only way this program will pay out is when the saving offsets the seasonal drop we usually get in fat-cattle prices in the fall of the year. **END**

SUCCESSFUL FARMING

"Does *that* explain where all the money goes?"

200 pounds per acre of U·S·S Ammonium Sulphate raised corn yield 15 bushels

MR. HANSON felt that his yields were not high enough. A local farm demonstration indicated that *nitrogen* deficiency was very likely the cause. So in the spring of 1951 he applied 200 pounds per acre of U·S·S Ammonium Sulphate to part of his corn field.

The part treated with fertilizer plus U·S·S Ammonium Sulphate averaged 90 bushels per acre, or 15 bushels better than the part treated with fertilizer only.

Mr. Hanson figured that he was netting a considerable profit on his use of Ammonium Sulphate. Not only was he getting more corn, but the carry-over residual effects of Ammonium Sulphate resulted in more oats raised the following year on the same field. Says Mr. Hanson, "Just the extra straw you get would more than pay for the Sulphate you put on."

Though drought caused the yield to drop last year, his yield of 55-60 bushels of corn per acre was far above par for his neighborhood. Prior to his use of U·S·S Ammonium Sulphate, he says, "I know it would not have been more than 30-35 bushels."

To keep his yields high and as insurance against the damaging effects of future drought, Mr. Hanson has ordered eight tons of U·S·S Ammonium Sulphate from his fertilizer dealer for application this spring.

U·S·S Ammonium Sulphate is a quality, kiln-dried material that is free-running and less corrosive to drills and other distributing equipment. It will not leach out in heavy rains, but is available when the plants need it.

Look for U·S·S Ammonium Sulphate in the moisture-proof 100-pound bag . . . bright yellow with a green label. It always means "better nitrogen for better yields" whether in direct applications or in complete fertilizers.

U·S·S Ammonium Sulphate USS

4-628

UNITED STATES STEEL

Mulch with manure after planting. Spread straw, corncobs, other material. Leaving residue on top holds water

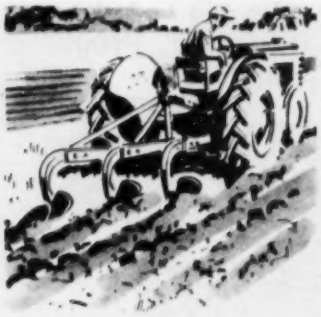
Contour and strip crop to slow down water on slopes. If slope is about same along contour, strips can be same width, eliminating point rows. Alternate corn and grains with hay

Seed legumes in young corn as soon as weeds are controlled. Leaves of plants catch rain, let it drip off onto soil. Seed as shown here in wide-row corn, or seed with an endgate seeder

Slow the raindrops; don't let water run off when it comes

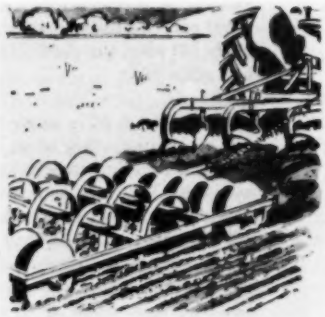
Drawings: Gunell

Help soil soak up more water—to let more in



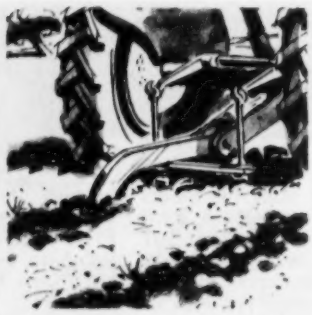
Add organic matter to soil to increase its water-holding capacity. Plow down manure, stubble, or sod. If your soil is very depleted in water, postpone second-year corn—plow under a sod

Plow when dry enough. When soil is dry enough that it will not not form a mud ball, but is crumbly, plowing will not hurt structure. But plowing when wet compacts the soil



Work soil less to maintain a good structure. Double up on operations. Examples: plow and pull harrow behind; pull three implements at a time—not two

Drain soils to permit better aeration, deeper root penetration. Tiling, surface ditching, land-smoothing all work



Deep till if your soils have become too compact from tillage, natural causes. Subsoiling, as shown, or plowing deeper both open the soil for more water and deeper root penetration

Fertilize and lime if soil tests show your soils need them—for a more extensive root system. Broadcast fertilizer and plow it down, apply as starter, or side-dress, either liquid or dry

Help water go deep; then, make roots go to subsoil moisture

By Stan Geiser

Don't let dry weather slice your yields—plan now to

Keep corn's feet wet in August

Don't let a nice damp spring fool you into thinking your corn will be well-watered come August. Farmers who did in 1953 would have given anything for 1 inch of rain when their soils turned to dust, and leaves began to roll.

To have moisture at your corn's root tips this August, *take steps now* to: hold water where it falls, help it soak in, make it go deeper, and help roots grow to it. Follow the ideas shown above, and your corn's roots will be more moist in August—ears bigger in September.

Research backs up [*Turn to page 162*

"What are the facts about life insurance in this country?"

A NORTHWESTERN MUTUAL POLICYHOLDER. *Mr. Johnson has long acted on his personal convictions on life insurance. He has established a sound and substantial program for himself and his family.*

A thoughtful analysis for family men

by **HERBERT F. JOHNSON**

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"IN travelling through other countries, I am always impressed with how much better we in America provide for the future of our families. But, of course, here we are accustomed to a much higher standard of living than the rest of the world.

"Actually, with only one-sixteenth of the world's population, we own three-fourths of all the life insurance. Three out of four American families are owners of life insurance—more than participate in any other single form of savings.

"Yet, there are aspects of the insurance coverage of the American family which are *not* so comforting. One-quarter of our families still have no insurance; and a high percentage of policyholders have little more than a token participation in life insurance protection.

"I believe family providers have some serious thinking to do about insurance coverage if they want an adequate standard of living assured for their dependents."

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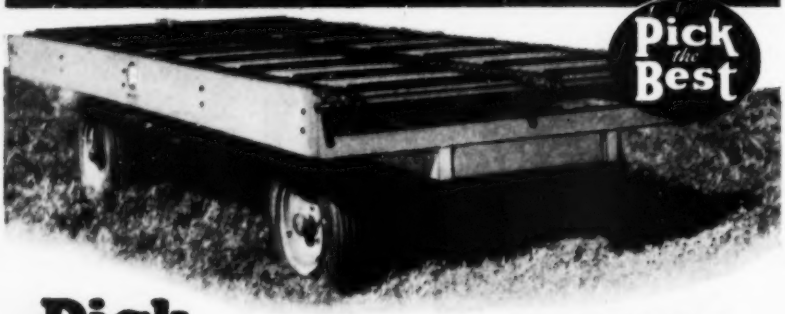

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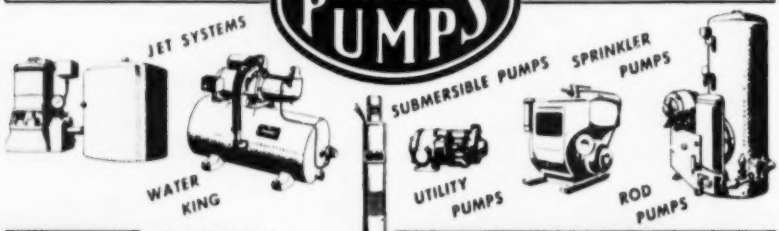

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W

Keep corn's feet wet

From page 160

these suggested practices with proof. First, let us look at how we can keep water where it falls.

New York tests showed that 10 tons of manure spread after planting saved more water than 20 tons spread before planting. In Ohio, farming on the contour cut down on the amount of water running off by 75 to 80 percent. Strip-cropping with contouring at Pennsylvania State College saved 7 percent more water than contouring without strip-cropping.

Leaving ridges and furrows by listing or other practices helps contouring and strip-cropping save even more moisture. In western Iowa, contour listing of corn saved 1 inch more moisture than contour surface planting.

What about helping your soil soak up more water? Dr. G. O. Schwab, Iowa State College agricultural engineer, says anything that helps keep good structure also helps soil soak up and hold more water. Good crop rotation is an example. In Missouri tests, 11 percent more rain soaked into soil where a corn, wheat, hay rotation was used than where land was in continuous corn.

Adding organic matter helps soil soak up water like a sponge. When peatmoss was added to a clay-loam soil in one United States Department of Agriculture experiment, that soil was able to hold 24 percent more water.

Plowing soil dry enough and working it less also help keep better structure and up the amount of water a soil can take and hold. Farmers in Michigan have been getting higher yields by plowing and working—in one operation—then planting.

Now, how can you get roots down into the subsoil where they'll have moisture in August? First, by draining too-wet land. Roots won't reach out in waterlogged land early in the year, and will be too small to get the moisture deeper in the soil in August.

Your answer: Tiling, or putting down extra strings of tile; surface ditching, or land smoothing. Your local soil conservation service technician can help you here.

Deep tillage may be worthwhile if your soil has a definite compact layer that will keep roots and moisture from penetrating. Research on deep tillage alone has shown it just pays for itself.

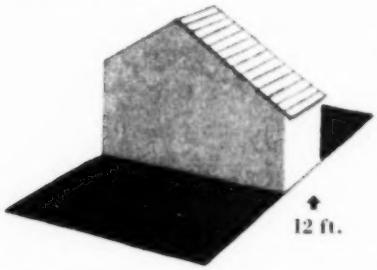
But where fertilizer and lime were placed deeply when subsoiling in Missouri and Indiana, yield increases more than paid for the cost of the treatment by the second year.

Fertilizing and liming helps develop longer, heavier, healthier roots that can forage better for nutrients and water when needed. In Illinois tests in 1952, adding fertilizer and lime increased corn yields 55 bushels an acre in one test. The biggest part of the increase was credited to increased root growth that helped roots get moisture and food in August—when ears were being made. **END**

A thrifty, flexible barn

From page 65

simple partitions between poles allow you to reduce them, add additional ones, or even change entirely.



Estimated cost of construction for each bent of thrifty, flexible barn

	Materials	*Labor*
Indiana	$256	$135
Iowa	239	95
Minnesota	257	103
Missouri	242	121
Nebraska	288	111
New York	275	78

This table gives you an idea only of the cost. If you build a barn with this cross-section, multiply costs by number of bents

As with any pole barn, this barn requires certain structural considerations for long-time service. Most important are pressure treating with wood preservative all poles and lumber in contact with ground or manure; placing poles at least 5′ deep; providing *special* attention to joints between roofing, roof sheathing, rafters, and poles—all must resist an *upward* pull by the wind; and placing 18″ concrete pads beneath poles that support additional loft weight of bedding. An article, "Build your pole barn to last," page 48 in the August 1953 *Successful Farming*, illustrates these points in detail.

Cheap sources of TDN's?

From what crops do you get the greatest amounts of total digestible nutrients (TDN) for the money?

Cornell University scientists say pasture is first, hay second, and corn silage third. Following is a listing that may help you plan your cropping program.

Crop	Avg. yield of TDN per acre	Cost of TDN per acre
Pasture	1.0 tons	$10.53
Hay	1.1	40.14
Corn silage	1.87	46.20
Grass silage	1.23	47.10
Corn grain	1.03	55.90
Wheat	.77	70.17
Oats	.63	84.79

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HOW'D you like to walk into a beautiful kitchen like this every morning? Walls gleaming like rich, rubbed pine make the day seem brighter! You can have a kitchen like this. It costs a lot less than you think because you use Gold Bond Gypsum Grainboard and do the job yourself.

Actually, Gold Bond Grainboard costs just a fraction of what wood costs, yet it gives you the full natural beauty of a fine wood finish—Knotty Pine, Bleached Walnut or Dark Walnut, as you choose. And it's a *practical* kitchen finish, too—fireproof, durable and easily cleaned with a damp cloth.

Grainboard is exceptionally easy to work with. It comes in easy-to-handle panels and planks. Saw and nail them just like wood. Gold Bond Grainboard nails are colored to match the finishes—they blend right in.

Your local Gold Bond lumber and building material dealer will give you clear, step-by-step instructions. You'll get practical advice on your remodeling plans—whether it's a Grainboard kitchen, an attic bedroom or a basement gameroom. See him now... and get started!

FREE Gold Bond How-To-Do-It Plan No. 13. Complete, illustrated instructions for building the kitchen shown above, or one like it to fit your space. Send for your free copy today! National Gypsum Company, Buffalo 2, N.Y.

ADD-A-ROOM NOW WITH Gold Bond®

NATIONAL GYPSUM CO., Dept. SF-44, Buffalo 2, N. Y.

Please send me FREE How-To-Do-It Plan No. 13 described above. I would also like to remodel my attic ..... basement .....

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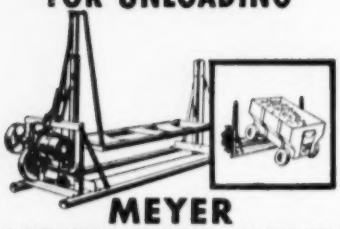

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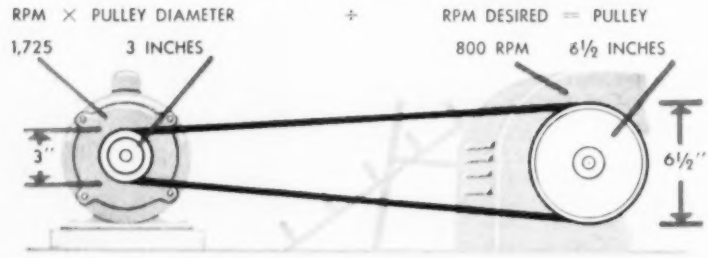
How to Take advantage of V-belts

V-belt "muscles" work hard, but you must keep them in shape to stay in the groove

Here's how to get the right rpm on your farm machines



Most farm motors operate at 1,725 rpm. Pulley determines rpm of machine. Use formula above, substituting figures

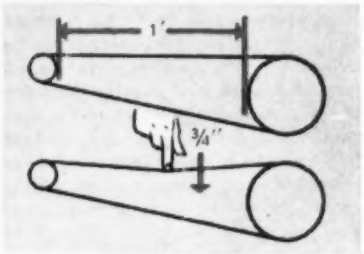
By Will Ernest

Your V-belts have mechanical muscles.

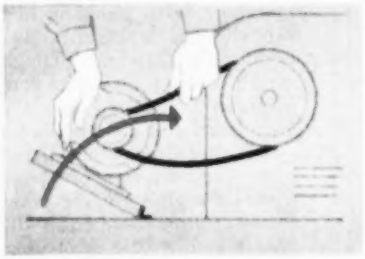
Bend a V-belt and you'll notice a slight bulge along the angled sides. It swells much like the muscle in your arm swells when you bend it.

The belt gets its gripping power by exerting force on the sides of the grooves as it bends around the pulley. That means the grooves must have smooth, straight sides for the best performance.

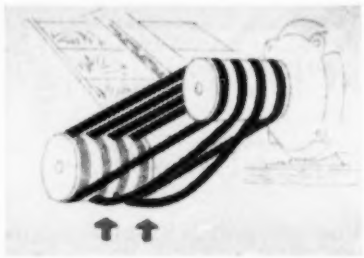
Rubber-impregnated fabric protects the internal structure of the belts, but you must keep oil away from them. Oil is pure poison to V-belts.



Allow ½" to ¾" play per foot of belt between pulley shafts. Snap belt like a rubber band. If it pings, it's too tight

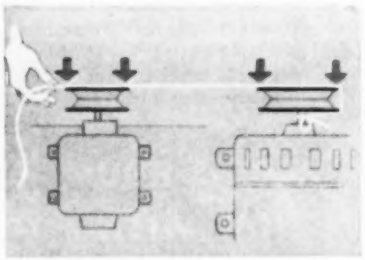


Release take-up adjustment to install a belt. *Never roll belt on pulley.* Hinged motor mount (above) saves time and labor

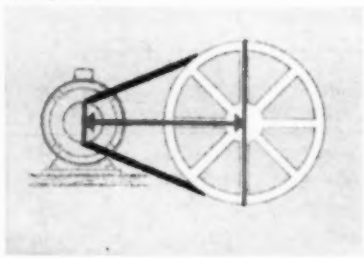


Install complete set of belts when one or two wear out. Otherwise, new belts are overworked, last fraction of normal time

Drawings: Bade



Check alignment of the pulleys with cord or straightedge ruler. Misaligned pulleys cause uneven tension, shorten life of belt



On V to flat drives, make distance between center of two pulleys approximately same as the diameter of the large pulley

THIS YEAR EXTRA YIELD

THIS SPRING

Yes, this Spring, perhaps more than any Spring, you're going to do everything possible to assure getting the most yield and the greatest profits from your corn land. You'll plow, disk and harrow a little more carefully. You'll probably increase the amount of fertilizer. And more than ever you'll want hybrid seed corn with proven ability to give you Extra Yield. This is the year to let facts determine the kind of seed corn you will plant.

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Genuine PFISTER HYBRIDS

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GENERAL OFFICES: AURORA, ILLINOIS

...Keep out of this line this year

Remember the long wait in line at the elevator last year? Longest ever for most farmers. Some grain didn't get in at all—had to be put in poor, temporary storage. All available grain bins were gobbled up fast. The outlook for the coming harvest indicates an even greater shortage of storage space.

Order BUTLER bins now!

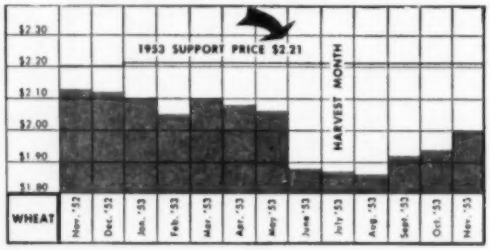
... and beat the last-minute scramble for storage space. Then you can hold your grain for the full government support price *or* a higher market price—whichever is most profitable! Most Butler bins bought in 1953 paid for themselves and earned an extra profit as well.

Order now; financing is easy. Butler bins are U.S.D.A. approved, eligible for ASC (formerly PMA) storage facilities loans. They qualify for the fast, 60-month tax write-off.

Proved permanent storage through years of use on thousands of farms, weather-tight and rat-proof too, because they are precision punched and formed. Snug bottom fit, rigid door frames and die-formed door boards make them grain-tight. Butler bins preserve grain quality for higher prices, better feed and seed.

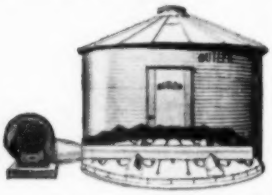
Only Butler bins are available with new Butler Force-Aire—the low-cost, easily installed crop drying equipment that controls moisture, temperature and insects. See your Butler dealer. Order your Butler bins today. Be *sure* of delivery.

Upgrade your grain with new Force-Aire crop drying equipment. It circulates natural, unheated air through the grain, dries 18 to 24% moisture grain for safe storage. This means you can combine earlier, recover more grain from the field. Force-Aire too is eligible for ASC (formerly PMA) loans.



Farm storage pays! Chart shows average support prices and on-the-farm prices for wheat, Nov. '52 through Nov. '53 (15th of each month). Note low price at harvest time, typical of other cash grains during the period charted.

"I cleared 18c a bushel on my wheat with my Butler bins and Force-Aire crop drying equipment," says Elmer H. Miller, White Pigeon, Michigan. His profit story was duplicated by other Butler owners all over the country.



New Butler Force-Aire crop drying equipment gives you a complete grain conditioning unit for all Butler bins in single or multiple installations. Arrows show how ducts distribute air evenly throughout grain. Butler bins are available in 1000, 1330, 1650, 2200 and 3276-bu. sizes.

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Dept. 84, Richmond, California

I'm interested in Butler bins and Force-Aire crop drying equipment. Please send me more information and name of my nearest Butler dealer.

Name .....

P. O. .....

R. F. D. ..... State .....

Make one cow do

From page 54

the season. To feed his cows as well in summer as in winter, Archie always keeps high-quality hay in big racks on pasture. Five fields are rotated every few days.

All of his hay, incidentally, is cut at an early stage of maturity and baled. It is fed three times a day. He's sold on this practice because early-cut hay means more pay. Cornell specialists, for example, figured that each can of milk produced from hay cut in the seed stage cost 67 cents more, and at the bloom stage 38 cents more than from early-cut hay.

All the cows get individual, careful treatment and are fed according to their needs and their production. At first Archie limited the grain ration to 20 pounds of grain per cow, but this rule no longer holds. Cows that give more than 85 pounds of milk a day get up to 24 pounds of grain a day.

Why? Because this dairyman believes that without the additional grain it's impossible to hold the condition of a cow producing at this high rate. Moreover, when cows drop in production, the cut in their 1-to-3 grain ration lags by about a month. Crimped or coarse-ground oats make up one-fourth to one-third of the grain ration.

In the early spring—4 to 6 weeks before the milkers are turned out on pasture—this dairyman feeds a mixture I hadn't previously seen. It consists of 400 pounds of beet pulp, 1,200 pounds of chopped alfalfa, and 400 pounds of molasses. This mixture is soaked in silage carts 8 to 10 hours before it's fed at night, and each cow gets the dry-weight equivalent of 3 to 4 pounds a day.

The reason for the practice is explained in this fashion: "In March and in early April the cows begin to smell grass, and they get uneasy. This feeding mixture is as good as any I know of to hold production high right at that time. Moreover, it adds variety and helps to stretch out the hay if we're running a little short."

Archie's experience proves that larger cows produce more milk than smaller ones because they can eat more feed. Under general farm conditions, for every 100 pounds increase in average weight, each cow will produce 250 to 800 pounds more milk a year.

Archie favors fall freshening for the majority of his herd, but plans to have cows freshen throughout the year so he doesn't have big "ups and downs" in production.

When asked about the value of milk testing, this young dairyman said:

"If you don't test, many cows will slip you a fast one by milking very heavy for the first three or four months. Some good cows that don't give such a heavy early production, but hold up for 7 or 8 months, may be sold even though they give more milk in a year than the other cows. A testing program gives you a basis for selecting replacements, tells which ones to sell, and ends guesswork." END

Why WISCONSIN HEAVY-DUTY Air-Cooled ENGINES are Best for FARM EQUIPMENT

YOU GET Heavy-Duty Variable Load "Lugging Power" for operating combines, hay balers, insecticide sprayers, forage harvesters and various other machines that work under variable loads which may increase considerably above the normal engine horsepower load.

When the going gets tough and the engine really has to go to work is when Wisconsin Engines show what they're made of! When sudden over-loads slow down the engine and the torque increases, your Wisconsin Heavy-Duty Air-Cooled Engine has the "Lugging Power" that hangs on like a team of mules leaning into the harness . . . and pulls through without loss of efficiency or stalling. This can be important when you are working against time and weather.

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YOU GET Top Performance Under All Weather Conditions, plus low-cost maintenance and long engine life.

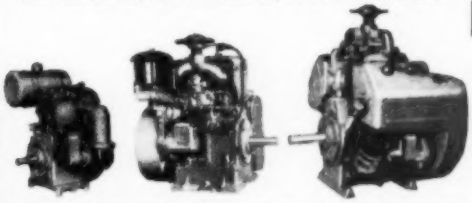
YOU GET Quickly Available Service through Authorized Wisconsin Engine Dealers and the dealers of farm equipment manufacturers who use these engines for powering their equipment.

These are a few of the reasons Why Wisconsin Engines are Best for your Farm Equipment . . . reasons why you should specify "Wisconsin" when you buy new power machinery. Write for free copy of Wisconsin Engine Bulletin No. S-154.

Heavy-Duty Variable Load Lugging Power, as supplied on this M-M "69" Harvester.

Another Variable Load application is this New Holland "Grass Eater" Forage Harvester.

This Wisconsin-powered Carver Irrigation pump illustrates a Heavy-Duty Continuous Load.



4-cycle single-cylinder models, 3 to 9 hp. 2-cylinder models 7 to 15 hp. V-type 4-cylinder models 15 to 36 hp.

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Power TO FIT THE MACHINE

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. . . IN THE EASY-TO-USE

Hopper-Pak!

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Then keep STONEMO before your birds free choice at all times . . . to help them make better use of their feed . . . grow faster . . . lower feeding costs!

Get STONEMO in the handy 10-lb. HOPPER-PAK. It saves work — saves time! Trays pull out to make a 2-way diner. Contains enough for 100 chicks up to 3½ or 4 weeks. Order STONEMO HOPPER-PAKS when you order chicks!

FOLLOW THESE 3 STEPS!

FINE SIZE STONEMO — First 2 days—Feed fine chick grains and fine-size STONEMO. Mix 10 lbs. grain to 1 lb. grit. 3 days to 4 weeks—Start feeding mash...give fine-size STONEMO in HOPPER-PAK, or hoppers.

MEDIUM SIZE STONEMO — 4 weeks to 8-10 weeks—Give medium-size STONEMO free choice in clean hoppers.

COARSE SIZE STONEMO — 8-10 weeks on—Keep coarse-size STONEMO before birds at all times.

Also in 50 and 80-lb. economy bags. See your feed or poultry supply dealer!

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LITHONIA, GEORGIA

STONEMO
the Grit with the "EXTRA GRINDING SURFACES"

1954's legume pests . . . Knock 'em out of your hayfield

Spittlebugs, pea aphids, and clover-leaf weevils caused thousands of hayfields to go limp in 1953. Iowa farmers alone plowed down nearly 50,000 acres of clover—after aphids and weevils had riddled their stands.

In total, 230,000 hay acres in Iowa were attacked by pea aphids and clover-leaf weevils. In Ohio, over 250,000 acres were sprayed for spittlebug control. Many more acres were infested.

The way it looks now, we may have a repeat performance by these three pests. T. H. Parks, entomology specialist at Ohio State, says entomologists in the east-central states consider the spittlebug a permanent legume pest.

Dr. J. H. Lilly, Iowa State College entomologist, says weather conditions in the fall of 1953 were similar to those in the fall of 1952 that preceded a heavy infestation of pea aphids and clover-leaf weevils. He looks for more trouble with these pests in the north-central states in 1954.

To help you avoid plowing under a possible record hay crop, we've gathered the latest controls for the hay pests you're most apt to have.

Spittlebugs. Meadow spittlebugs get their name from the mass of salivalike material that surrounds the nymph, or young. Spittlebugs attack clovers and alfalfa in hay and pasture.

Ohio has done extensive research and control in knocking spittlebugs out of hay. T. H. Parks says 1 quart of an 11-percent emulsion of benzene hexachloride (BHC) per acre or 1½ pounds of actual toxaphene per acre both controlled spittlebugs in Ohio.

However, both these sprays will leave residues, and cannot be safely used on pastures. Methoxychlor, at 1½ actual pounds per acre, is the recommended treatment for spittlebugs on pasture.

Spraying hay crops for spittlebugs should be completed at least 3 weeks before cutting, because of possible residues. Parks recommends spraying from late April to about the middle of May, when BHC or toxaphene is used.

Hay yields have often been increased one-half—and sometimes doubled—by keeping tab on spittlebugs, says Parks.

Pea aphids. When your alfalfa or clovers get about 6 inches high, greenish, soft-bodied plant lice drop into your pants cuffs by the hundreds as you walk through the field. These are pea aphids. They multiply so rapidly you may lose a large portion of your first crop before you see the damage—if you weren't expecting them.

These tiny insects with white cast-off skins sap nutrients from the plants. Plants may wilt, or even die, if infestation is heavy.

In Iowa, Dr. J. H. Lilly reports that .3 pound of gamma BHC or lindane per acre controlled pea aphids when prevailing daytime temperatures were 60 degrees or above. Parks says 2 quarts of an 11-percent emulsion of BHC per acre did a good job of controlling aphids, as well as spittlebugs and clover-leaf weevils at the same time, in Ohio in 1953.

Parathion and malathion will clean aphids out of your hayfields without leaving residues—but both are hazardous to use. Of the two, parathion is cheaper, but also more dangerous. When parathion is

[*Turn to page 170*

Clover-leaf-weevil damage in red clover above is typical. Grubs are very hard to find—usually can be found curled up like a letter C at the base of the plant

Photographs: Fletcher, Hufnagle

Spittlebugs are easily identified by the frothy mass that surrounds the nymph, or young. Squeeze the masses to find nymphs

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IT MARKS CAREFUL DRIVERS.. PROTECTS YOU ON THE ROAD!

State Farm's famous emblem—honored badge of "a careful driver, soundly insured"—now comes in "Scotchlite"—the new material that sparkles brightly under headlight beams.

This new emblem takes 10 seconds to apply, adheres firmly to your bumper. When you park, it gives timely warning to approaching motorists. If your tail light should fail, it provides life-saving emergency reflection.

State Farm members can obtain their new Scotchlite safety emblems from local State Farm agents now.

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State Farm seeks to insure careful drivers *only*—the kind who are less likely to have costly accidents. That's why State Farm can give such excellent protection and service at rock-bottom rates. If you can qualify, it will pay you to investigate State Farm Mutual now. Call your local agent today. See "State Farm Insurance" in your classified phone book.

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State Farm Insurance is written only by the
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and its wholly owned affiliates:
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Home office: Bloomington, Illinois. Field claim offices in 300 principal cities. 7,000 agents in 40 states and Canada

Hear "Cecil Brown News Commentaries" Saturdays and Sundays over Mutual stations. Check local radio listings.

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K160	6.6 H.P.
K330	12.0 H.P.
K660	26.8 H.P.

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ELECTRIC PLANTS • AIR-COOLED ENGINES
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Years of experience in perfecting ROTO-HOE plus plenty of "garden testing" by thousands of users, insures your satisfaction. Send for our new free 16-page full color catalog which can save you hundreds of dollars. Look at these ROTO-HOE advantages:

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Dr. Naylor's DEHORNING PASTE

STRAWBERRY PLANTS

Write for catalog, fully describing all varieties, with best methods of growing them. Satisfaction Guaranteed.
J. H. SHIVERS, 54 Main St., Allen, Md.

1954's legume pests

From page 168

used, *manufacturers' directions must be followed to the letter.*

Clover-leaf weevils. The grubs of this insect are the most destructive to your legumes. The tiny worms, showing off a white stripe on their green backs, are most often found near the base of the plant. They eat big holes out of the legume leaves, slowing the growth of young plants.

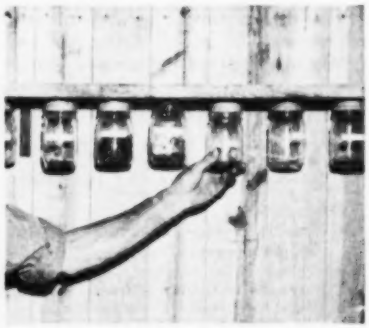
Doctor Lilly recommends at least .3 pound of gamma BHC per acre in early May, or when the worms are very numerous. Lilly says 1 pound of actual DDT per acre is also effective, but slow acting. Both BHC and DDT should be used at least 3 weeks before cutting the hay.

Parks says 2 quarts of an 11-percent emulsion of BHC per acre controlled these weevils right along with the spittlebugs and aphids in Ohio. Three pints per acre were effective for clover-leaf weevils alone if applied early, while the grubs were still small.

Besides the spittlebug, pea aphid, and clover-leaf weevil, Doctor Lilly says grasshoppers may be bad in 1954, if we have a dry spring. For young hoppers, Lilly recommends the following dosages of actual insecticides per acre: toxaphene, ¾ pound; chlordane, ½ pound; aldrin, ⅕ pound; or BHC, ⅛ pound. These dosages should be doubled for adult grasshoppers.

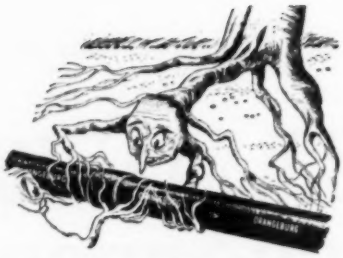
The best way to head off heavy grasshopper damage, says Lilly, is to spray the young hoppers in their grassy, overwintering areas before they spread out into other crops. **END**

Handy place for small parts



Glass fruit jars fastened to the underside of a shelf make it easy for David Noller, Keokuk County, Iowa, to locate bolts, screws, or washers.

This arrangement keeps hardware free from dirt and rust. Lids are fastened to the shelf with roofing nails.—*A. M. W., Iowa.*



I FIXED MY WET CELLAR

I got to the root of my whole wet-cellar problem. Those thirsty little tree roots were the cause. They just dig in to every little leaky old-style pipe joint and clog the pipe.

I know. I saw the backed-up water on my cellar floor!

But I never will again! I put in that new Orangeburg Pipe to carry the roof-water away from my house. This amazing pipe is root-proof – leak-proof – water-tight – in every joint.

And how easy it was! So light the plumber could lift several lengths at once! A few taps of his hammer – and each water-tight joint was made. Fast, too! No sealing compound. No cement. No swabbing.

Maybe, I might have even done it myself. But I was happy just to pay the low cost.

Got a wet cellar? A low spot on your lawn? Septic tank drainage out of hand? Don't tolerate it another minute.

Ask *your* plumber about this wonderful new Orangeburg Pipe today!

Write now to Dept. SF44 for complete information on this amazing pipe. Orangeburg Manufacturing Co., Orangeburg, New York.

Help for Home Planners. For help with your home planning, furnishing and decorating problems, visit one of the stores cooperating with Successful Farming's home planning service. You'll find a store near you listed on page 145.

FOR TROUBLE-FREE OPERATION

Of Your Farm Machinery

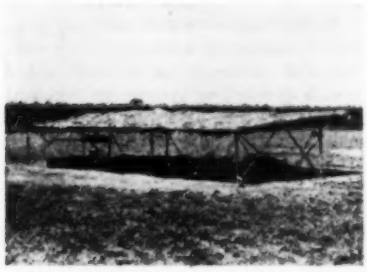
Stop BELT SLIPPAGE With PULMORE LIQUID BELT TREATMENT

Why put up with equipment that only half works because of belt-slippage trouble? Use PULMORE Liquid Belt Treatment and increase traction 200% to 500%—Get full work from seed cleaners, grain mixers, feed grinders and other machinery. Ask your dealer for PULMORE! Write for free illustrated circular!

BELTRACTION COMPANY
1815 W. Winona St. • Chicago 40, Ill.

"Raise so many pigs"

From page 50



Sunshades, figured on 8 square feet per pig, are set up in all pastures. Bill makes the big sunshades out of welded steel pipe

he'd better get out of the swine business.

Little by little, this Indiana farmer worked out a system of hog raising that's about as easy and efficient as any I've seen. Here are seven of the main reasons why:

1. Feed is never carried or shoveled after pigs are 10 days old. In summer, ear corn is delivered to hog pastures with a dump truck and spread on the ground. Supplement self-feeders are filled with a self-unloading wagon. In winter, shelled corn and supplement self-feeders are used inside buildings, but are still filled with the self-unloading wagon.

2. All individual houses and self-feeders are portable. A tractor *carries* the houses and feeders when they have to be moved. Two steel bars fastened to the tractor manure loader are used for carrying. To move either houses or feeders, Bill simply uses the tractor to force the bars under the house or feeder, raises the hydraulic loader, and drives off.

3. Water is piped to all pastures. Small,

Sorting chute is set up in the pig pastures at marketing time. Bill tries to sell all pigs as soon as they reach 225-pound minimum

automatic waterers mounted on wooden platforms are set over the main pipe and can be connected quickly. The wooden platforms are also carried by using the tractor.

4. A combination machine shed and fertilizer-storage building serves as a farrowing house. There is no central farrowing house on the farm.

5. The grain-storage building has built-in sheller, grinder, and scale. All feed is stored here, and the self-unloading wagon can be filled from several different overhead bins. [*Turn to page 172*

SEE YOUR CARDINAL DEALER OR WRITE FOR FREE LITERATURE

LML ENGINEERING & MFG. CORP. 687 S. Chauncey Street COLUMBIA CITY, INDIANA

Decorating advice. Stores offering *Successful Farming's* home planning service are listed on page 145. Visit store nearest you for help with decorating problems.

PUMP WATER *FAST!*

DRAIN WASH TUBS, CELLARS, CISTERNS
IRRIGATE—FILL TANKS—DRAW WELL WATER

Pumps 2800 GPH 420 GPH at 75' High or 1600 GPH from 25' well. Sturdy, Rustproof Alloy Metal Six Blade Impeller. Uses any 1/8 to 1/2 H.P. Motor. Will not leak or clog. Fits any garden hose. Immediate Money Back Guarantee. Send Check, M.O., or C.O.D.

$8.95 UP

MOORE MANUFACTURING CO.
SWEDESBORO 71 NEW JERSEY

COWPOX*—RINGWORM
SKIN ABRASIONS

*Blu-Kote dries up Cowpox lesions, controls secondary infection. It covers the wound with a quick-drying, deep-penetrating coating, effective against both pus producing bacteria and common fungus infections. 4 oz. bottle $1.00 at dealers' or by mail postpaid.

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PAINT IT ON

Dr. Naylor's BLU-KOTE

Successful Farming's *practical, up-to-the-minute information will help you and your family enjoy better farm living.*

TRENCHES EXCAVATES LOADS

HOPTO

DIGGER SHOVEL LOADER

USES THE POWER YOU ALREADY HAVE!

Your tractor powers the heavy-duty hydraulic system of the *low-cost* HOPTO. Unskilled operator easily and quickly masters 180° swing, control of boom, dipper stick, tilt of bucket. Choice of buckets and backhoes for trenching, excavating, loading, digging of trench silos, footings, foundations, etc. This power take-off operated unit is the farm model of Hopto used by contractors, grave diggers, municipalities.

DRAINAGE WORK • DAM BUILDING • EXCAVATING

Make improvements on your own place and do profitable custom work for neighbors . . . more work in half a day than one man can do in seven long days! . . . Safely . . . Profitably ! ! ! Get complete information *NOW!*

Write TODAY for FREE FOLDER!

OTHER MODELS: Truck Mounted, Self-Propelled Track Type, Self-Powered Trailer Type, Crawler Tractor Mounted.

BADGER MACHINE COMPANY

WINONA, MINNESOTA • DEPT. 7

Let's look at the Facts!

NOT MORE ACRES, BUT MORE PER ACRE...
DECREASES YOUR COSTS AND INCREASES YOUR PROFITS

Producing more per acre . . . more per animal . . . more per man hour of labor . . . you cut your costs. You can do this without adding to surpluses. Merely produce more on fewer acres thereby reducing your unit costs. For example, fixed costs such as ground preparation, planting, cultivating, etc. may be $31.66 per acre of corn. If you produce 50 bushel per acre, your fixed costs per bushel would be approximately 64¢. But by producing 80 bushel per acre your fixed costs would be only about 40¢ per bushel.

To produce more per acre you must follow good soil management practices with the use of more fertilizer per acre. Your State Agriculture College Extension Service and Experiment Station, the County Agent or your DAVCO Agent can supply you with the latest recommendations . . . amounts per acre and the right analyses to use. Years of actual experiments, conducted by your State Agriculture Experiment Station, have proved their recommendations to be practical as well as profitable.

When ordering fertilizer order the best in fertilizer . . . DAVCO Granulated Fertilizer. Your dependable DAVCO Agent has a good supply of all recommended analyses and he is anxious to explain the many ways DAVCO Granulated Fertilizer makes farming easier and more profitable.

DAVCO GRANULATED FERTILIZER

NOTE: It will pay to get your spring supply of DAVCO Granulated Fertilizer today. The best selection of analyses is available now, in excellent condition. DAVCO Granulated Fertilizer stores well and comes out of storage in good drilling condition.

Progress Through Chemistry

THE DAVISON CHEMICAL CORPORATION

Baltimore, Maryland

Plants in Alliance, Ohio; Baltimore, Maryland; Columbus, Ohio; Lansing, Michigan; Nashville, Tennessee; New Albany, Indiana; New Orleans, Louisiana; Perry, Iowa; Savannah, Georgia.

"Raise so many pigs"

From page 171

6. Pigs and sows are moved from buildings to pasture with the tractor. A crate, mounted on the tractor hydraulic drawbar, is used to shuttle sows and pigs from the machine shed-farrowing house to summer pasture.

7. Forage, both summer and winter, helps keep down feed costs. Alfalfa-Ladino pastures are divided and are easily reached with machinery. A high proportion of alfalfa meal is mixed with the supplement for winter feeding.

To see how these seven hog-raising helps fit into a system, you've got to follow Bill through a year's operation. That's just what I did, visiting Bill several times after taking the picture which appears on our cover this month. This is how all seven points mentioned earlier fit into one hog-raising system:

Spring pigs are farrowed in January and February. When sows are about ready to farrow, individual hoghouses are pulled into the arch-roof machine-and-fertilizer-storage building. The sows farrow in the individual houses inside the machine shed. At feeding time, sows are turned out of the houses and eat from self-feeders filled with a bulky ration. This practice also gives the sows needed exercise. Electrical outlets along the wall of the shed are used for heat lamps. Capacity of the shed is 28 individual hoghouses.

Breeding dates are staggered so that no more than 28 sows farrow at one time. When the pigs are 10 days old, they're moved, with the sows, to other shelters on pasture. The tractor with the crate on the hydraulic drawbar is used here.

When one batch of sows and pigs have been moved out of the individual houses inside the machine shed, another batch of sows is brought in—and the operation is repeated until *all* sows have farrowed.

The spring pigs and sows are turned onto early rye pasture as soon as possible. Pastures are divided, and only 4 or 5 sows and their litters are in one lot. A waterer and feeder are set in the fence line and serve two lots.

Pigs are weaned at 8 weeks and go on alfalfa-Ladino pasture. Here, the pigs are fed ear corn spread on the ground with Bill's dump truck. Supplement is fed in self-feeders. The self-unloading wagon is used to keep the feeders full.

"I figure the self-unloading wagon and handy feed-storage building take the place of another hired man," said Bill. "I couldn't raise all these pigs if I didn't have both."

Once the pigs are weaned, they run together in one or more pastures. Shades, figured on 8 square feet per pig, are set up. Water is piped to all pastures. From this time until market, all Bill has to do is dump a load of ear corn every now and then, and run out with the self-unloading wagon to keep the supplement feeders full.

At market time—usually the middle of July to the middle of August—Bill sets up sorting pens out in the pasture. Pigs are

sold by weight. As soon as they reach 225 pounds, they go.

For the fall pigs which arrive in August and September, Bill reverses the farrowing procedure somewhat. The sows are allowed to run loose in the machine shed until they farrow. Then they are put in pens. Twenty-seven pens can be set up in the shed.

When the fall pigs are 10 days old, they're moved, along with the sows, out to shelters and individual houses on pasture. Bill said he prefers the shelters from a sanitation standpoint. The shelters have no floors and are kept on clean ground. Again, the crate on the back of the tractor is used for moving the sows and pigs out to the pastures.

About the last of November, the fall pigs are moved into the two barns. One holds about 350 hogs; the other about 300. These fall pigs are fed shelled corn in self-feeders while in the barns. Three 550-bushel permanent feeders in the barns are filled from the self-unloading wagon.

Bill believes in feeding hogs green forage in the winter as well as pasturing in the summer. He's had good luck, and cut his winter supplement bill by adding 500 pounds of alfalfa meal to each ton of supplement. Fall pigs are usually sold about the last week in January.

With so many pigs on one farm during a year, disease could be quite a problem. So far, Bill figures he has been lucky, but he also goes to some pains to *keep disease off* the farm. He gives most of the credit for disease-free pigs to the fact that he never brings new pigs—outside of boars—onto the farm.

Bill buys boars, but uses his own gilts. When boars are brought to the farm they are isolated and tested. And before buying, Bill checks with the veterinarian in the area where the boars are purchased. Also, all pigs are put on clean ground every year.

Mechanization—that's the thing that has made raising hogs easier for Bill. Substituting horsepower for hand power convinced young Bill Congleton that hog raising *can* be easier. **END**

SUCCESSFUL FARMING

"Oh, it won't be necessary to bring him back in six months. Maybe a year . . . two years. . . ."

Pasture capacity up 50% with P.L.U.*

...says Ralph Stacy

***P.L.U. means Practical Land Use. Practical Land Use means applying all the skills and knowledge obtainable so you get the most out of each hour and dollar you spend on each acre of your land from now on.**

Ralph Stacy, ex G.I. and Vo-ag teacher, bought a run down farm near Tiffin, Ohio just to see what he could do with it. By following Practical Land Use he has, so far, been able to live well and increase the pasture carrying capacity of his land 50%.

The land that Ralph bought was very poor. In order to know exactly what to do to make it produce, Ralph used his own training and sought technical help. A good source for this, incidentally, is your Red Brand Fence Dealer. Then Ralph applied the suggested farming techniques to his land. He now has a Practical Land Use plan specifically made up for his particular farm, according to the way *he* wants to farm. A five year rotation emphasizing grassland farming for a livestock operation, as outlined by his plan, has helped Ralph achieve worthwhile results—a good living based on an increased pasture carrying capacity of 50% so far. Ralph expects bigger and better results from now on.

Practical Land Use can do the same for you. The sooner you get all the facts about it the sooner you can realize greater income and security from your farm.

Your Red Brand Fence Dealer will be glad to help you get the facts about Practical Land Use. He is the man who handles that "extra value" fence combination—Red Brand Fence and Red Top Steel Posts. Ask him to show you a copy of "Willing Acres." It contains the essential facts about Practical Land Use. It also explains what happens when a farmer says, "I'd like a Practical Land Use plan for my farm."

Ralph Stacy and family

WASHING AWAY OF THE SOIL was troubling Vaclav Nemec and his son, Adolph, on their farm in Prague, Nebraska. Contour plowing together with improved rotations, as suggested by their Practical Land Use plan, helped the Nemecs solve their problem and has also raised yields and income over 30%.

HARDER AND HARDER SOIL worried William Kirby of New Holland, Illinois to the point where he did something about it. He applied the pasture rotations and other suggestions in his Practical Land Use plan. His soil now works easier and has provided him with 40% greater yields and income.

Want to know how more farmers are increasing production?

Listen to "Red" Brand every Tuesday and Thursday on the radio. Or write for free copies of the illustrated booklet "Practical Land Use Broadcaster." They contain many money-making suggestions.

The Red Brand Fence Dealer is the man to see. He carries that long-lasting, Galvannealed Red Brand Fence and those easy-to-set Red Top Steel Posts.

The illustrations shown are from the Keystone Practical Land Use Broadcaster, available free from your Red Brand Fence Dealer.

KEYSTONE STEEL & WIRE COMPANY

Peoria 7, Illinois

RED BRAND Fence • RED TOP Steel Posts • Keystone Poultry Netting
Corn Cribbing • Non-Climbable and Ornamental Fence • Nails • Gates • Bale Ties

Ask your veterinarian WHY Viracine Hog Cholera Vaccine gets more pigs to market!

CUTTER

Viracine®

GROWN IN TEST TUBES
NOT RABBITS OR PIGS!

CUTTER Laboratories • Chicago, Ill., Berkeley, Calif.

A Valuable Short Course on "How to Save More Pigs"
Successful Farming editors have prepared a film strip with 10-page commentary, illustrating successful raising techniques. Sale price: $2.25. Write Successful Farming.

Keep Teat Open
Keep It Healing
Keep It Milking

To maintain unrestricted milk flow and provide antiseptic protection is of first importance in the care of injured teats. Dr. Naylor's Medicated Teat Dilators are a dependable treatment for maintaining full stream milking through the teat canal in cases of Sore Teats, Scab Teats, Bruised Teats, Obstructions.

Contain Sulfathiazole

Dr. Naylor's Sulfathiazole Medicated Dilators act as an internal bandage to the teat canal. They provide gentle, non-irritating support to delicate teat canal lining and promote normal relaxation at end of teat by prolonged antiseptic contact directly at site of trouble.

EASY TO USE . . . Simply keep a Dr. Naylor Dilator in the teat between milkings until teat milks free by hand.

Large Pkg. (45 Dilators) **$1.00**
Trial Pkg. (16 Dilators) **50c**

At drug and farm stores or by mail.

H. W. Naylor Co.
Morris 7, N.Y.

Dr. Naylor's MEDICATED Teat Dilators

now choose from three

Galvanized all-steel construction. Heavy duty model, extra wide (18" to 22" cross-braced). 4 roller power-elevated derrick, quick-change head. Lower priced 16' model. New Junior Portable model (10" to 17" wide) is low cost all purpose elevator with many famous Meyer features. Elevates all—baled hay, corn, small grain.

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IF YOU COMBINE FROM THE WINDROW

write today for free illustrated booklet in color containing latest technical and general information about Innes equipment for handling crops from the windrow. Address Innes Company, Bettendorf, Iowa.

Automatic LEVEL-RIDE Tractor Seat

Joy Rider HYDRAULIC Tractor Seat

Only Joy Rider has it—Automatic Level-Ride! You sit level when plowing or working hill-side ground. Level-Ride takes weight off of one hip while plowing. Joy Rider has everything! Hydraulic shock, dual spring action with instant weight adjustment, full tilt-back for standing room. You can sit level, too. Hundred thousand in use. Frame only, $24.00, (add 10% for East and West Coast and Canada). For most all makes of tractors. See your implement dealer or write.

America's No. 1 Tractor Seat

Fleischer-Schmid Corp., Dept. 24, Columbus, Nebraska

Veterinary

Saw first from underside when dehorning

If you start sawing from the underside when dehorning, you'll have a cleaner wound when you finish (see picture below). If you were to finish sawing at the underside, the loose skin above the ear

would pull around and leave an unsightly wound.

Use a hacksaw with the blade inserted upside down. Pull the ear down with the hand to get the loose skin out of the way. The resulting cut will be no larger than the base of the horn.

• • • •

Prevent brine poisoning by covering salt boxes

You may not feed your hogs brine deliberately, but you still may kill them with brine poisoning.

In one case of poisoning, the farmer had placed salt, free-choice, in a trough for his hogs. The open trough collected snow and ice through the winter. When the weather warmed, this melted, making brine that tasted good to the hogs.

It's a good idea to feed salt, all right, but also a good idea to cover the salt boxes and clean them out regularly to prevent poisoning.

• • • •

Place elastrators high to stop circulation

Elastrators work fine for castrating calves—if used properly.

But we know of one farmer who placed them too low. When the scrotum dropped off, the testicles were left high against the calf's belly. The job of castration then had to be completed surgically.

If you use elastrators, be sure to squeeze the testicles well down into the scrotum. Then, apply the rubber bands above them, so that circulation of blood will be cut off.

helps

Burn dead chickens!

Recently we read about some hogs which died after eating chickens killed by fowl cholera. Dead chickens can cause trouble in other ways, too. Swine may contract tuberculosis after eating chickens which have died of this disease. Newcastle disease can be spread by the droppings of cats which have eaten birds killed by Newcastle.

Ordinary burial isn't enough for the dangerous carcasses, for dogs may then dig them up. It's better to burn dead chickens to be sure.

• • • •

New slant on antibiotics

Are antibiotics most important as growth promoters or as health protectors?

Recent research indicates maybe antibiotics help chicks get a fast start in life while they're getting used to new types of bacteria.

In one test, baby chicks in brand-new quarters *without* antibiotics gained faster than chicks in old quarters getting antibiotics. Chicks in both new and old quarters used feed with equal efficiency.

• • • •

Clear up bumblefoot for more eggs again

You'll be money ahead to treat those "light-footed" hens suffering from swollen or abscessed foot pads (as shown below).

Bumblefoot, as the condition is most often known, can be cured if you catch the case early enough. Moving hens with mild cases into dry, clean quarters and

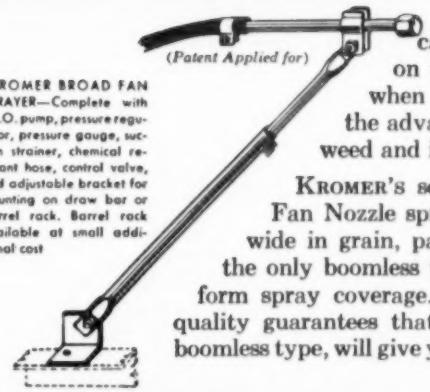
painting lesions daily with iodine for a week should clear up the trouble.

Hens with swellings that contain pus need more careful attention. Open the swelling, wash out the wound with hydrogen of peroxide, and then pack it with penicillin ointment. Bandage the foot and keep the affected hen away from the flock for a while.

HERE ARE DOLLAR SAVINGS THAT MAKE SENSE TO FARMERS

ONLY *$74.50 F.O.B. FACTORY

KROMER® BROAD FAN SPRAYER



*KROMER BROAD FAN SPRAYER—Complete with P.T.O. pump, pressure regulator, pressure gauge, suction strainer, chemical resistant hose, control valve, and adjustable bracket for mounting on draw bar or barrel rack. Barrel rack available at small additional cost

NOW for only $74.50 you can have a complete sprayer on your farm. You can spray when spraying is needed to get the advantages offered by chemical weed and insect control.

KROMER's sensational single-tip Broad Fan Nozzle sprays a swath up to 50 feet wide in grain, pastures, or row crops. It is the only boomless type nozzle that gives uniform spray coverage. KROMER's reputation for quality guarantees that no other sprayer, of the boomless type, will give you better results.

WRITE FOR FREE FOLDERS...

Our folders contain money-saving sprayer facts on Broad Fan Models, Tractor Models, Trailer Models and Sprayers for Fertilizer Application. Write us today.

O. W. KROMER CO.
DEPT. 426, MINNEAPOLIS 11, MINNESOTA

BROAD FAN MODELS
TRAILER MODELS
TRACTOR MODELS
CHEMICAL WEED CONTROL

Keep *Successful Farming* coming your way. Each month in *Successful Farming*, you will find the kind of information that will help you increase your profits, make your farm work more convenient, and your farm living more comfortable.

Wheelhorse
Makes gardening easier — adds to your leisure!

FREE Catalog! Send Postcard today!

Only $149.50 2 h.p. model

You'll buy a Wheelhorse when you compare price... construction... design and ease of handling! Easy to change attachments help you plow, cultivate, harrow, haul, spray, mow, saw, cut, roll, plow snow. Guaranteed! 2, 2½, 3 and 3½ h.p. models. Write!

Dealerships Available! Write Today!

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2843-G3 Dixie Way North, South Bend 17, Ind.

A home planning service tailored to farm living is being offered by one store near you. See page 145.

RANCHERS! CATTLEMEN! FARMERS!

CALL YOUR CATTLE WITH THE NEW Kattle Kaller AUTO HORN

GUARANTEED to Call Cattle for Feeding, Shipment, Dehorning

Bellows Like a Bull—Cattle Respond Quickly. Greatest time-saver for livestock industry. Easily installed on car—truck. Deep penetrating tone carries for miles. Imitates any cattle sound. Great novelty horn, too. If your dealer can't supply you, order direct and send us his name. Send check, M. O., C. O. D. Money back if not satisfied. Dealer inquiries invited.

Complete with Steering Post Control Lever

SPECIAL INTRODUCTORY OFFER $10.95 Post-paid. ($2 below reg. list)

KATTLE KALLER DIV., 1928 So. 20th St., Omaha, Nebr.

Fed up

ON DRY-OUT-HARD WORK GLOVES?

Oh Boy—What a Surprise You'll Have When You Put On a Pair of

WOLVERINE PIGSKINS

A NEW PAIR FREE IF THEY DRY OUT HARD OR STIFF
WHEN DRIED AT NORMAL WARM ROOM TEMPERATURE

Genuine sueded grain Pigskin—extra wear—extra comfort—because they're tanned that way by the WOLVERINE Triple-Tanning process. Now—see your dealer—try on a pair!

WOLVERINE SHOE & TANNING CORP. Rockford, Michigan

Remarkable Results

Raising Baby Chicks

Mrs. C. M. Bradshaw, Diagonal, Ia., says: "I have been using Walko Tablets for 35 years with splendid results. I would not think of trying to raise Baby Chicks without them. I also use them for my grown birds with the same satisfaction."

You Run No Risk

Buy a package of Walko Tablets today at your druggist or poultry supply dealer. Use them in the drinking water to aid in preventing the spread of disease through contaminated water. Satisfy yourself as have thousands of others who depend upon Walko Tablets year after year in raising their baby chicks. You buy Walko Tablets at our risk. We guarantee to refund your money promptly if you are not entirely satisfied with results. The Waterloo Savings Bank, the oldest and strongest bank in Waterloo, Iowa, stands back of our guarantee. Sent direct postpaid if your dealer cannot supply you. Price 60c, $1.20, $2.50 and $4.00.

Walker Remedy Co. Waterloo, Iowa

Keep *Successful Farming* coming your way. Each month in *Successful Farming*, you will find the kind of information that will help you increase your profits, make your farm work more convenient, and your farm living more comfortable.

If you have a screwdriver

Give your work a professional finish by filling screw holes with Plastic Wood. Handles like putty and hardens into wood.

Sands down to a smooth, hard finish—resists weather.

YOU NEED "PLASTIC WOOD"®

Food facts and fancies

From page 27

adult needs a pint of milk a day in some form, and children need almost a quart of milk. The mothers of these families used an average of only ½ cup of milk each day for themselves—some used no milk at all. The fathers used an average of 1¼ cups a day. The milk the children drank seldom averaged as much as two cups a day. These families were above average in their interest in being well fed. But even they found that some improvements were needed in their choice of foods if they wanted to be truly well fed.

When you think of food fancies or fallacies, maybe you think of questions about specific foods. One question that many of you homemakers ask is, "It it true that fat is hard to digest?" The answer is an emphatic *no!* The body digests all kinds of fats more slowly than it digests the starches, sugars, and proteins in the food you eat. In this way, all the food substances don't crowd into the blood stream at the same time, but are absorbed gradually. This prolongs the satisfaction from a meal and prevents that "empty feeling." Fat helps to make a meal that will "stick to your ribs." *The harder you work, the more important it is that you have some fat in every meal—not only to help supply the energy you need, but also to make your meal stay with you.*

This leads to another question, "Are fried foods harmful?" Again the answer is *no.* You do need to be careful about two things when you are frying food: (1) Don't fry food at too high a temperature. Don't let the fat get to the smoking stage. At that point, it suffers a chemical breakdown. The same thing in smoking fat that makes your eyes smart also irritates the lining of your throat and stomach. (2) Don't add calories to foods by frying them if you and your family shouldn't have extra calories. It's easy to add several hundred calories a meal if some of the foods are fried.

You may want to ask, "Is it a fact or is it fiction?" about other foods or food ideas. If you suspect it is fiction, you don't have to take just one person's word for it. It's possible to check the reliability of anyone's information. You can write to the extension service or the home economics department at the state college in your state. There may be a nutritionist with the state department of health in your state capital. Foods editors of reputable magazines and newspapers can also help you.

Do write for information when you need it; the facts will be of help and interest to you and your friends. **END**

Send us your recipes

Do you have a recipe to submit for testing in our kitchen? *Successful Farming* pays $5 for each recipe published on the Successful Recipes pages. Please write on only one side of the paper. We cannot return unused recipes.—*Editors*

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Decorating advice. Stores offering **Successful Farming's** home planning service are listed on page 145. Visit starred store nearest you for help with decorating problems.

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5 oils in 1 sinks healing liquid deep into aching muscles—stimulates warmth and drives out pain. Does not burn skin. At all drug stores. If your druggist can not supply you, enclose $1.50 for big bottle. . . .

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Advertisements using illustration or display (large) type, $7.00 per agate line. Available to advertisers who make a mail offer of merchandise (including poultry, livestock, pet stock) or services (schools, etc.) at a stated price, or offer a mail-order catalog. Word classified (no illustration or display type)—14-word minimum—all classifications—90 cents a word. Write Successful Farming, Des Moines 3, Iowa.

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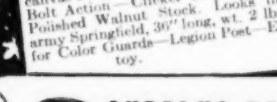

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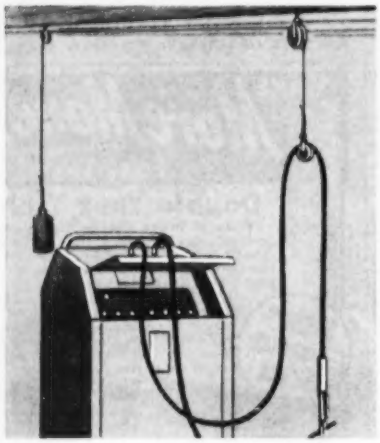
All around the farm *A page written by our readers*

I locate slow leaks in an inner tube by brushing soapsuds over the inflated tube. For this purpose I use an old paintbrush and coffee can to get lather. Even the smallest of leaks will cause bubbles.—*J. H. R., Minnesota.*

To keep welding cable out of the way, but available as required, I ran the cable through a pulley. I fixed another small pulley overhead, above the welder, and a third at the same height to one side near the wall (as shown). Through these fixed pulleys I ran a ¼″ rope, and fastened the cable pulley to one end of it.

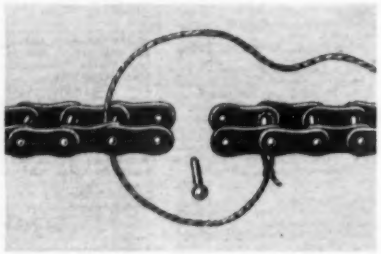
On the other end of the rope I fastened a weight to counterbalance the weight of my welding cable. When the



electrode is pulled down the weight rises, and if weight is right the electrode cable will remain as adjusted.—*H. E. C., Minnesota.*

When planting corn, I drag one tire chain behind each lister bottom. This smooths the earth and forms a mulch in the furrow.

To hold the side chains apart, I weld together all the links in each of two or three cross-chains. This makes the welded cross-chains serve as a spreader.—*H. C. B., Kansas.*



When assembling a tight chain, I attach a stout cord or small rope to the links (as shown). This makes an easy job out of what can be a difficult one. By pulling on the rope, you can move the links in place.—*N. D. K., Iowa.*

To fix a leak in my wooden stock tank where the pipe leads from the cup-type waterer through the tank stave, I drained the tank to below the level of the pipe. Then I used a heat lamp to dry the wood around the pipe, and sealed it tight with roofing cement.—*H. W. A., Iowa.*

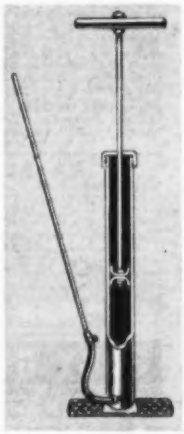
To avoid losing the steel pin on the swinging drawbar on our tractor, we welded a ring of ¼″ iron to the top of the pin and fastened it to the drawbar with a chain.—*L. E. D., Iowa.*

We remove the dents from our 10-gallon milk cans by using a small, compact automobile jack inside the can.—*C. S., Iowa.*

Spiking 2x4s to top of fence posts (as shown below) makes a neat, strong support for your woven-wire fences. Posts must be of uniform height. You can use 2x6s as a top rail.—*W. F. O., South Dakota.*

We save time caring for our vegetable garden all through the season by using the field corn planter to mark the rows. When the garden is planted in these rows, my husband can use the field cultivator, covering the entire area in a very short time. This leaves just a little area near the rows requiring the use of hand weeders.—*N. E., North Dakota.*

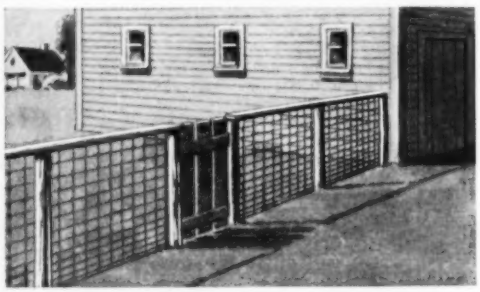
I made a fluid extractor from an old tire pump. Reversing an extra leather on the pump rod gives both pushing and pulling pressure to rod (as shown). Then I removed the air check at the bottom of the pump.



A regular gas-line tube—of any length desired—replaces a pump hose. This is especially handy for removing oil from the filters, or even the crankcases, in the case of farm cars and tractors.—*L. A. S., Nebraska.*

To prevent chicks from smothering if they crowd up under a hover, I make a wood frame out of 1x1 or 1x2 lumber. This is slightly smaller than the area covered by the brooder itself. I cover this frame with ½″ hardware cloth.

With this frame under the brooder, the chicks roost on wire which is an inch or so above the floor; they can't smother. It has saved us hundreds of chicks each year.—*J. F. B., Indiana.*



Successful Farming **invites you to share your ideas with the rest of our readers. We pay $5 for each item upon publication, but regret we cannot return those we don't use.**—*The Editors*

...and the corn came tumblin' down

AS NO. 1 MENACE to our No. 1 food crop, soil pests like corn rootworms reduce yields by as much as *fifty per cent*.

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Shell Chemical now gives farmers a potent weapon against such attack – Aldrin. Easily applied before or during corn planting as a spray or in fertilizer mixtures, Aldrin kills pests when inhaled, eaten or touched. One application remains effective for months and as little as half a pound protects an acre of land from corn rootworms. A pound of Aldrin provides control of these additional pests – wireworms, seed-corn maggots, white grubs, cutworms, seed-corn beetles, cornfield ants, and grape colaspis. *All* cornfield soil pests succumb to Aldrin, properly applied to soil.

Aldrin for farm use is another example of Shell Chemical's partnership with industry and agriculture.

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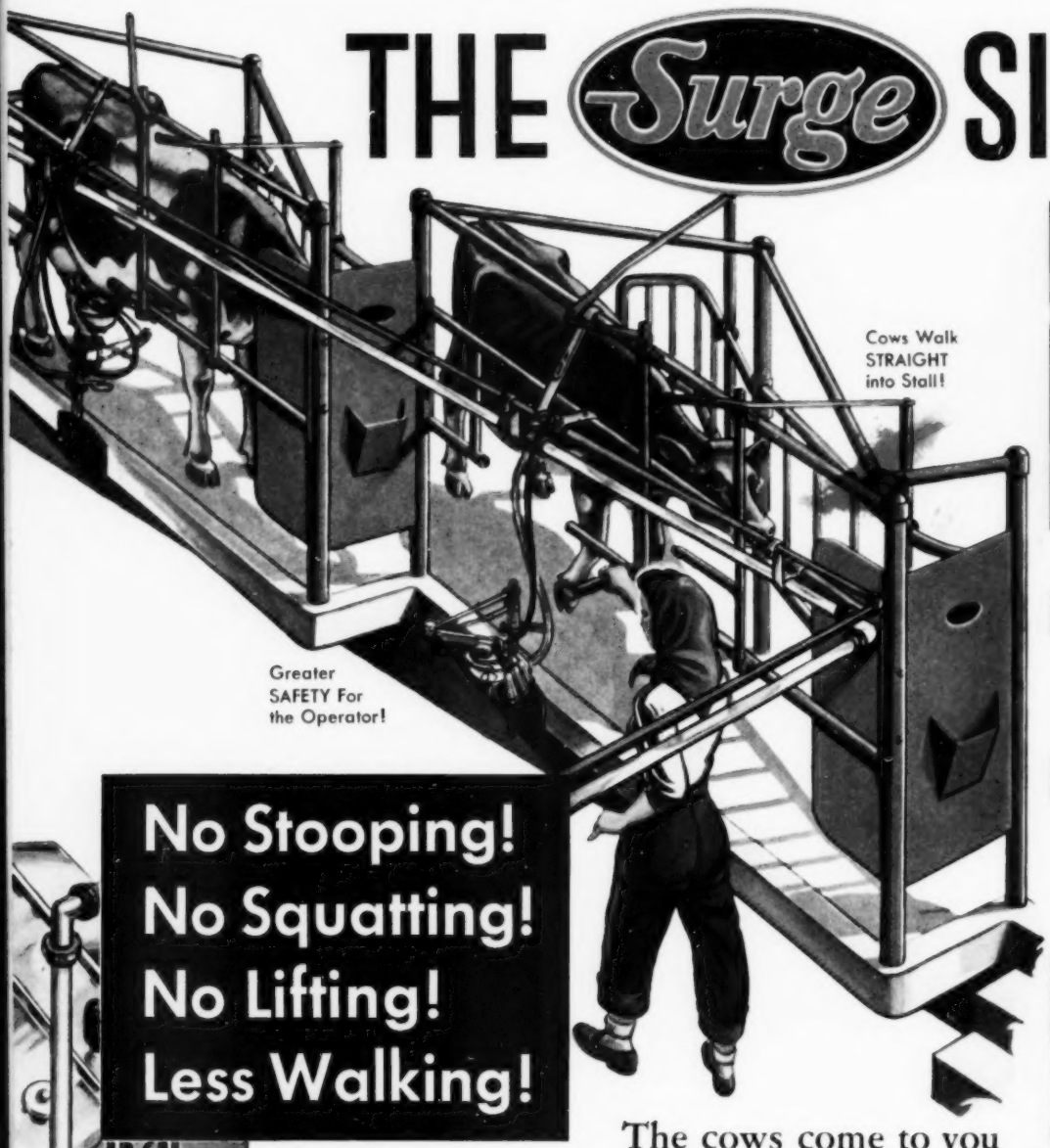

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